

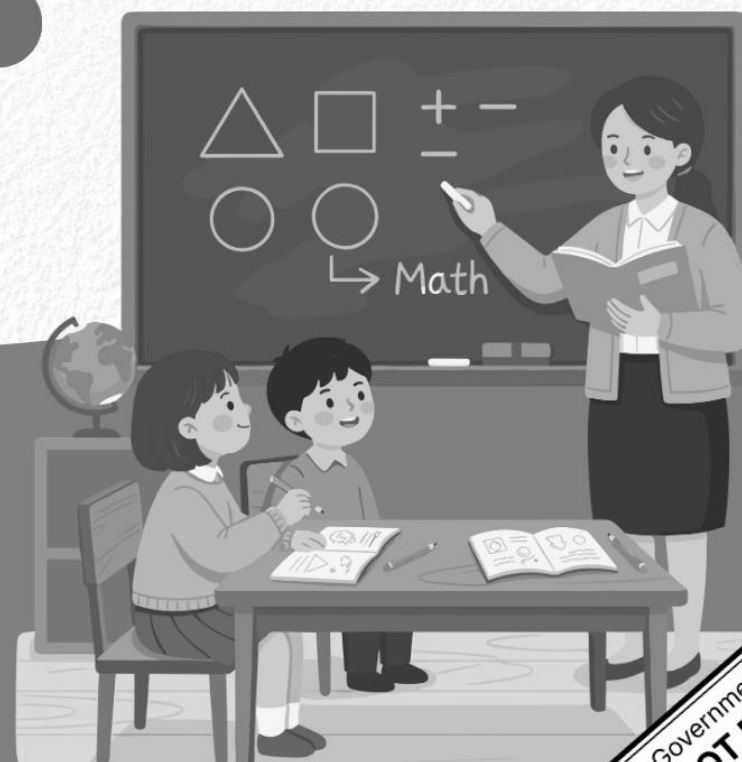


LEARNER'S WORKSHEETS

MATH

GRADE

6



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ARAL-Mathematics Learner's Worksheets

Key Stage 2 – Grade 6

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ARAL Math Grade 6 Worksheet 1 (Part 1)

DIVISIBILITY RULES REVIEW

For 2 : All even numbers are divisible by 2.

Examples:

128 is even so it is divisible by 2

129 is not even so it is not divisible by 2

For 3: Add the digits. If the sum is divisible by 3, so is the number.

Examples:

Is 381 divisible by 3?

$3 + 8 + 1 = 12$ (divisible by 3)

Thus, 381 is divisible by 3.

Is 217 divisible by 3?

$2 + 1 + 7 = 10$ (not divisible by 3)

Thus, 217 is not divisible by 3.

For 5: Any number ending in 5 or 0 is divisible by 5.

Examples: 175 and 200 are divisible by 5.

For 10: All numbers ending in 0 is divisible by 10.

Examples: 200, 50, and 450 are divisible by 10.

For 9: Add the digits. If the sum is divisible by 9, so is the number.

Examples:

Is 756 divisible by 9?

$7 + 5 + 6 = 18$ (divisible by 9)

Thus, 756 is divisible by 9.

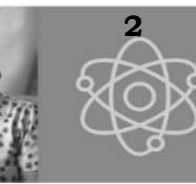
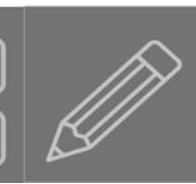
Is 217 divisible by 9?

$2 + 1 + 7 = 10$ (not divisible by 9)

Thus, 217 is not divisible by 9.

Check the box below all the number/s by which the given number is divisible.

	2	3	5	9	10
1) 245					
2) 240					
3) 256					
4) 432					
5) 454					
6) 455					
7) 480					
8) 543					
9) 610					
10) 612					





ARAL Math Grade 6 Worksheet 1 (Part 2)

	2	3	5	9	10	Fill in the blanks with SMALLEST digit that will make each number divisible by the given number.	
11) 630						2_4 (divisible by 9)	21)
12) 662						41_ (divisible by 2)	22)
						6_7 (divisible by 3)	23)
13) 729						74_ (divisible by 10)	24)
						_77 (divisible by 9)	25)
14) 750						16_ (divisible by 5)	26)
						_85 (divisible by 3)	27)
15) 768						72_ (divisible by 9)	28)
						5,23_ (divisible by 10)	29)
16) 780						7,67_ (divisible by 5)	30)
						4,6_7 (divisible by 9)	31)
17) 850						95_ (divisible by 5)	32)
						_615 (divisible by 3)	33)
18) 998						35_ (divisible by 9)	34)
						3,34_ (divisible by 10)	35)
19) 1,065							
20) 2,150							





ARAL Math Grade 6 Worksheet 2 (Part 1)

DIVISIBILITY RULES REVIEW



For 4: If the last two digits are divisible by 4, so is the number.

Example: 1,312 -12 is divisible by 4, so is 1,312.

For 6: If the number is divisible by 2 and 3, then it is divisible by 6.

Example: 114 is even, so it is divisible by 2.

$1 + 1 + 4 = 6$, so it is also divisible by 3.

Thus, 114 is divisible by 6.

For 8: If the last 3 digits are divisible by 8, so is the number.

Example: 9,816 - 816 is divisible by 8, so 9,816 is divisible by 8.

6,302 - 302 is not divisible by 8, so is 6302.

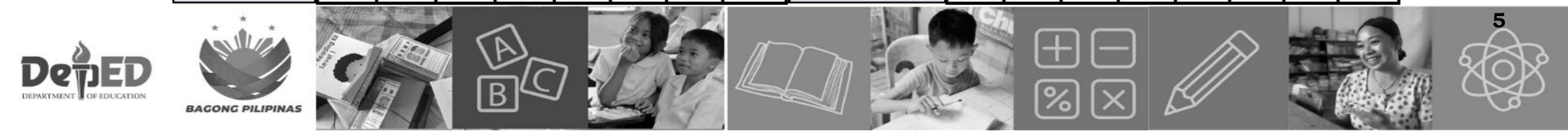
Check the box below all the number/s by which the given number is divisible.

	4	6	8
1) 648			
2) 924			
3) 216			
4) 460			
5) 618			
6) 248			
7) 6,816			
8) 6,424			
9) 9,428			
10) 6,864			



ARAL Math Grade 6 Worksheet 2 (Part 2)

	4	6	8		2	3	4	5	6	8	9	10
11) 9,232				21) 1,586								
12) 4,656				22) 4,686								
13) 7,344				23) 8,714								
14) 9,462				24) 7,089								
15) 1,284				25) 5,930								
Check the box below all the number/s by which the given number is divisible.				26) 2,967								
	2	3	4	5	6	8	9	10	27) 5,680			
16) 5,312									28) 6,657			
17) 1,492									29) 7,260			
18) 4,272									30) 9,688			
19) 2,725												
20) 9,963												





ARAL Math Grade 6 Worksheet 3 (Part 1)

Divisibility Rules

A number is said to be divisible by another number if when divided by that another number, the quotient would be a whole number (no remainder). We can say that the other number is a divisor of the given number.

To test divisibility without dividing, we apply the following rules:

Divisibility by 2:

A number is divisible by 2 if its last digit is an even number or ends with 0.
i.e. 37598 is divisible by 2 because its last digit, 8, is an even number.

Divisibility by 3:

A number is divisible by 3 if the sum of the digits is a multiple of 3.
i.e. 36 is divisible by 3 because $3 + 6 = 9$, 9 is a multiple of 3.

Divisibility by 4 :

A number is divisible by 4 if the last two digits are both 0 or if they are a multiple of 4.
i.e. 600 is divisible by 4 because the last two digits are both zero.
748 is divisible by 4 because 48 (last two digits) is a multiple of 4.

Divisibility by 5:

A number is divisible by 5 if the last digit is 0 or 5.
i.e. 1,005 is divisible by 5 because its last digit is 5.
5,000 is divisible by 5 because it ends with 0.

Divisibility by 6:

A number is divisible by 6 if it is both divisible by 2 and 3.
i.e. 636 is divisible by 6 since it is divisible by 2 and by 3.

Divisibility by 8:

A number is divisible by 8 if the last three digits are all zeroes or if they are a multiple of eight.
i.e. 1000 is divisible by 8 because its last three digits are all zeroes.
12,048 is divisible by 8 because the last three digits = 048 is a multiple of 8.

Divisibility by 9:

A number is divisible by 9 if the sum of its digits is a multiple of 9.
i.e. 996354 is divisible by 9 because the sum of its digits is 36, which is a multiple of 9.

Divisibility by 10:

A number is divisible by 10 if the last digit is 0.
i.e. 1450 is divisible by 10 because its last digit is 0.

Divisibility by 11:

Add the 1st, 3rd, 5th,... digits, then add the 2nd, 4th, 6th,... digits. If the difference between the two sums is zero or is a multiple of 11, then so is the number.

i.e. Show that 7,097,442 is divisible by 11:

1st digit = 7, 3rd = 9, 5th = 4, 7th = 2 Sum = 22

2nd digit = 0, 4th = 7, 6th = 4 Sum = 11

Difference: $22 - 11 = 11$, so the number is a multiple of 11.

1st	2nd	3rd	4th	5th	6th	7th	TOTAL
7		9		4		2	22
	0		7		4		11
Difference							11

Hence, the number is divisible of 11.

Divisibility by 12:

A number is divisible by 12 if it is divisible by both 3 and 4 at the same time. If a number passes both checks, it is divisible by 12.

i.e. show that 564 is divisible by 12.

Sum of digits: $5 + 6 + 4 = 15$. 15 divides by 3.

Last two digits: 64. 64 divides by 4

Result: 564 is divisible by 12.



ARAL Math Grade 6 Worksheet 3 (Part 2)

Is the first number divisible by the second? Write Yes or No and justify your answer by applying the rules learned.				FIRST NUMBER	SECOND NUMBER	YES/NO	JUSTIFICATION/SOLUTION
Ex: 129				900	3	15)	24)
160				4,016	8	16)	25)
297				2,079	11	17)	26)
590				5,935	6	18)	27)
876				4,850	10	19)	28)
595				5,634	6	20)	29)
215				2,105	5	21)	30)
5,634				5,136	12	22)	31)
				2,104	2	23)	32)





ARAL Math Grade 6 Worksheet 4 (Part 1)

Tell if the first number is divisible by the second. Write yes or no.		Tell what number are the following divisible by. Write 2,3,4,5,6,8,9,10, 11 or 12. Give all possible answers.	
265; 9	1)	800	11)
420; 2	2)	878	12)
505; 11	3)	160	13)
111; 3	4)	663	14)
696; 5	5)	445	15)
1,600; 4	6)	9,999	16)
2,228; 8	7)	1,144	17)
4,132; 12	8)	7,326	18)
5,640; 6	9)	7,400	19)
7,517; 10	10)	4,215	20)





ARAL Math Grade 6 Worksheet 4 (Part 2)

Check the box if the number is divisible by the number in that column.											
		2	3	4	5	6	8	9	10	11	12
21)	216										
22)	970										
23)	752										
24)	459										
25)	760										
26)	9,645										
27)	7,653										
28)	5,580										
29)	5,900										
30)	9,040										





ARAL Math Grade 6 Worksheet 5 (Part 1)

Evaluate the given expression. Show your solution and box your final answer.		11) $9 \times (10 \times 12)$	16) $2 \times (6 \div 6)$
1) $3 \times (13 \times 10)$	6) $(17 \times 2) \times 2$		
2) $6 + (10 \times 14)$	7) $(3 \times 11) + 2$	12) $8 \times (13 \times 10)$	17) $(7 \times 5) - 2$
3) $17 \times (2 \times 10)$	8) $(10 \times 12) + 4$	13) $19 \times (10 \times 3)$	18) $(10 - 4) + 8$
4) $(3 \times 44) \times 1$	9) $7 \times (10 \times 16)$	14) $(3 \times 8) + 2$	19) $(7 + 5) + 9$
5) $3 \times (1 \times 14)$	10) $40 \times (4 \times 10)$	15) $1 + (10 \times 6)$	20) $(10 - 10) + 4$





ARAL Math Grade 6 Worksheet 5 (Part 2)

21) $(10 + 1) + 10$	26) $(9 \div 9) \times 2$	31) $10 + (2 \times 6)$	36) $(9 \times 2) - 3$
22) $(7 \times 6) - 10$	27) $(4 \times 10) - 9$	32) $(6 \div 2) \times 7$	37) $4 \times (5 \times 9)$
23) $(8 \div 4) \times 6$	28) $1 + (1 \times 8)$	33) $5 + (9 \div 1)$	38) $3 + (5 \times 4)$
24) $(10 + 5) + 5$	29) $(10 + 9) + 3$	34) $(6 \times 12) - 2$	39) $(5 \times 6) + 2$
25) $5 + (7 \times 8)$	30) $7 - (9 - 5)$	35) $8 + (9 \times 7)$	40) $(12 \times 6) - 6$





ARAL Math Grade 6 Worksheet 6 (Part 1)

Evaluate the given expression. Show your solution and box your final answer.		11) $(49 \div 7) \div 1$	16) $(16 \div 4) \div 2$
1) $(10 \times 7) + 1$	6) $(36 \div 6) \div 1$	12) $(48 \div 8) \div 1$	17) $(15 \div 5) \div 3$
2) $(8 \times 2) + 9$	7) $(27 \div 9) \div 3$	13) $(9 \div 9) \div 1$	18) $(10 \div 5) \times 10$
3) $3 \times (9 \times 2)$	8) $(110 \div 10) \div 1$	14) $50 \div (200 \div 4)$	19) $1 \times (1 \div 1)$
4) $4 + (3 \times 6)$	9) $(36 \div 9) \div 2$	15) $(60 \div 10) \div 6$	20) $(7 \times 5) \div 1$
5) $(31 \times 1) + 1$	10) $(12 \div 4) \div 1$		





ARAL Math Grade 6 Worksheet 6 (Part 2)

21) $10 + (8 \times 1)$	26) $7 \times (5 \times 2)$	31) $7 + (7 + 9)$	36) $(2 \times 3) + 10$
22) $1 \times (9 - 7)$	27) $(8 \times 2) \times 2$	32) $(1 - 1) + 1$	37) $(6 \div 3) + 7$
23) $7 + (6 + 1)$	28) $6 \times (5 \div 1)$	33) $6 + (8 \times 3)$	38) $(5 \times 5) + 7$
24) $3 \times (9 \div 3)$	29) $(10 \times 9) - 7$	34) $(3 \times 3) + 9$	39) $(9 \times 9) - 8$
25) $(6 \times 6) \times 1$	30) $7 + (6 + 9)$	35) $1 \times (4 - 2)$	40) $4 + (3 \times 8)$





ARAL Math Grade 6 Worksheet 7 (Part 1)

Evaluate the given expression. Show your solution and box your final answer.		11) $(10 \times 6) + 5$	16) $(5 \times 3) - 2$
1) $(8 \times 5) - 10$	6) $(45 \div 5) - 3$	12) $(24 \div 3) - 3$	17) $(9 \times 3) - 1$
2) $(9 \times 9) - 8$	7) $(8 \times 5) + 5$	13) $(72 \div 9) - 6$	18) $(9 \times 3) - 9$
3) $(3 \times 5) + 8$	8) $45 - (2 \times 5)$	14) $(5 \times 9) + 0$	19) $(7 \times 5) + 7$
4) $(7 \times 6) + 23$	9) $(2 \times 10) - 5$	15) $34 - (6 \times 2)$	20) $(6 \times 4) + 4$
5) $(18 \div 2) - 3$	10) $(8 \times 3) + 2$		





ARAL Math Grade 6 Worksheet 7 (Part 2)

21) $(6 \times 6) \times 10$	26) $9 + (5 \times 5)$	31) $(5 \times 5) + 7$	36) $10 + (6 + 9)$
22) $(6 \times 8) \div 4$	27) $10 + (2 \times 8)$	32) $(3 \times 4) - 1$	37) $(6 \times 9) - 9$
23) $(3 \times 4) \div 6$	28) $(5 \div 5) \times 6$	33) $(5 \times 4) + 5$	38) $10 + (10 \div 5)$
24) $(8 \div 4) \times 5$	29) $(8 + 9) - 7$	34) $1 - (10 - 9)$	39) $(2 \div 1) \times 3$
25) $6 \times (10 - 4)$	30) $4 \times (6 \div 2)$	35) $(5 \times 5) - 10$	40) $6 \times (3 \times 5)$



ARAL Math Grade 6 Worksheet 8 (Part 1)

Evaluate the given expression. Show your solution and box your final answer.		11) $(7 \times 3) - 10$	16) $(9 \times 8) \div 4$
1) $4 - (9 \div 9)$	6) $(7 \times 2) + 10$		
2) $(8 \div 4) + 9$	7) $(4 \times 3) + 5$	12) $(4 - 3) \times 5$	17) $(9 + 7) - 1$
3) $(10 \times 3) \div 5$	8) $(10 + 10) + 1$	13) $1 \times (10 \times 8)$	18) $(3 \times 3) + 1$
4) $3 \times (5 \times 1)$	9) $2 + (3 \times 7)$	14) $(9 - 7) + 1$	19) $(8 \times 3) \div 1$
5) $(7 + 5) - 2$	10) $(10 \times 5) - 4$	15) $(10 + 9) - 6$	20) $(3 \times 8) - 6$



ARAL Math Grade 6 Worksheet 8 (Part 2)

21) $(8 + 7) + 7$	26) $(4 \div 1) \div 2$	31) $(2 \times 3) + 8$	36) $(5 + 9) + 6$
22) $(8 \times 3) \times 9$	27) $(8 \times 3) + 7$	32) $1 + (9 \times 5)$	37) $(6 \times 5) - 3$
23) $(8 - 2) + 7$	28) $(8 \times 4) - 10$	33) $1 + (8 \times 9)$	38) $2 \div (4 \div 2)$
24) $(5 \times 3) + 6$	29) $(6 + 8) + 7$	34) $(6 \times 7) - 6$	39) $(7 \times 5) - 1$
25) $(2 + 1) \times 9$	30) $(9 \times 8) - 1$	35) $1 + (6 \times 2)$	40) $(3 \times 4) + 10$



ARAL Math Grade 6 Worksheet 9 (Part 1)

Greatest Common Factor

Finding the GCF by Continuous Division

From the previous level, we have learned how to find the GCF of two numbers. The methods we used are Prime Factorization and Listing Method. Another method is by Continuous Division. We do this by dividing the numbers by the least prime factor common to two numbers continuously until the quotient are relatively prime (no common factor) already. Then we multiply all the common prime factors and that's the GCF of the two numbers.

Example: Find the GCF of 16 and 40 using continuous division.

$$\begin{array}{r|rr} 2 & 16 & 40 \\ 2 & 8 & 20 \\ 2 & 4 & 10 \\ & 2 & 5 \end{array}$$

$$2 \times 2 \times 2 = 8$$

The GCF of 16 and 40 is 8.

Find the GCF of the following set of numbers using Continuous Division. Show your solutions.

1) 10 and 50

2) 16 and 40

3) 28 and 40

6) 35 and 50

4) 36 and 52

7) 18 and 27

5) 20 and 50

8) 26 and 40





ARAL Math Grade 6 Worksheet 9 (Part 2)

9) 50 and 80	12) 48 and 72	15) 36 and 51	18) 120 and 150
10) 56 and 60	13) 32 and 44	16) 28 and 40	19) 90 and 135
11) 24 and 60	14) 110 and 150	17) 49 and 77	20) 150 and 200





ARAL Math Grade 6 Worksheet 10 (Part 1)

Finding the LCM of Three Numbers using Continuous Division

From the previous level we already learned how to get the LCM of two numbers using continuous division. Same procedure will do so in finding the LCM of three numbers.

Example:

1) Find the LCM of 20, 40 and 60.

$$\begin{array}{r|rrr}
 2 & 20 & 40 & 60 \\
 2 & 10 & 20 & 30 \\
 5 & 5 & 10 & 15 \\
 & 1 & 2 & 3
 \end{array}$$

$$2 \times 2 \times 5 \times 1 \times 2 \times 3 = \textcircled{120}$$

2) Find the LCM of 16, 18 and 20.

$$\begin{array}{r|rrr}
 2 & 16 & 18 & 20 \\
 2 & 8 & 9 & 10 \\
 & 4 & 9 & 5
 \end{array}$$

$$2 \times 2 \times 4 \times 9 \times 5 = \textcircled{720}$$

In this case, only 8 and 10 have a common factor. We can still factor out this common factor and disregard 9 and just bring it down. For other cases, continue dividing for as long as there's a common factor.

3) Find the LCM of 12, 20 and 25.

$$\begin{array}{r|rrr}
 4 & 12 & 20 & 25 \\
 5 & 3 & 5 & 25 \\
 & 3 & 1 & 5
 \end{array}$$

$$4 \times 5 \times 3 \times 1 \times 5 = \textcircled{300}$$

Find the LCM of the following set of numbers . Show your solutions.

1) 10, 15 and 30

4) 27, 36 and 54

2) 24, 32 and 40

5) 16, 20 and 24

3) 40, 24 and 48

6) 9, 12 and 18





ARAL Math Grade 6 Worksheet 10 (Part 2)

7) 12, 16 and 14	10) 12, 16 and 20	13) 12, 20 and 24	16) 28, 30 and 32
8) 14, 18 and 30	11) 8, 20 and 28	14) 15, 18 and 21	17) 25, 30 and 50
9) 9, 18 and 27	12) 10, 25 and 30	15) 12, 15 and 18	18) 22, 34 and 44



ARAL Math Grade 6 Worksheet 11 (Part 1)

More on GCF and LCM

It is easy to find the LCM of two numbers if we know their GCF. We simply multiply the numbers and divide it by their GCF.

$$\frac{N1 \times N2}{\text{GCF}} = \text{LCM}$$

Example:

Find the LCM of 35 and 50 given that their GCF is 5.

Solution:

$$\frac{35 \times 50}{5} = \frac{1,750}{5} = 350$$

The LCM of 35 and 50 is 350.

Find the LCM of the following set of numbers given their GCF. Show your solutions.

1) 12 and 30, GCF: 6

2) 10 and 50, GCF: 10

3) 9 and 12, GCF: 3

4) 14 and 24, GCF: 2

5) 12 and 40, GCF: 4

6) 15 and 35, GCF: 5

7) 25 and 40, GCF: 5

8) 28 and 42, GCF: 14

9) 40 and 60, GCF: 20

10) 15 and 85, GCF: 5



ARAL Math Grade 6 Worksheet 11 (Part 2)

Fill in the blanks with the missing data.			
	Product	GCF	LCM
11) 21 and 24			
12) 15 and 25			
13) 24 and 56			
14) 30 and 36			
15) 27 and 63			
16) 18 and 24			
17) 28 and 40			
18) 21 and 27			
19) 20 and 55			
20) 14 and 35			





ARAL Math Grade 6 Worksheet 12 (Part 1)

More on GCF and LCM

If the smaller number is a factor of the bigger number, then the smaller number is the GCF and the larger number is the LCM of the two numbers.

Example: Find the GCF and LCM of 9 and 27.

The smaller number is 9.

Is 9 a factor of the larger number 27?

$$27 \div 9 = 3$$

Yes, so the GCF of 9 and 27 is 9 and the LCM is 27.

Check if the smaller number is a factor of the bigger number through division then find their GCF and LCM. (Show the division.)

1) 10 and 30

GCF: _____

LCM: _____

2) 27 and 54

GCF: _____

LCM: _____

3) 25 and 50

GCF: _____

LCM: _____

4) 22 and 44

GCF: _____

LCM: _____

5) 15 and 30

GCF: _____

LCM: _____

6) 50 and 100

GCF: _____

LCM: _____

7) 26 and 52

GCF: _____

LCM: _____

8) 13 and 39

GCF: _____

LCM: _____

9) 24 and 72

GCF: _____

LCM: _____

10) 4 and 28

GCF: _____

LCM: _____





ARAL Math Grade 6 Worksheet 12 (Part 2)

11) 15 and 30 GCF: _____ LCM: _____	12) 48 and 144 GCF: _____ LCM: _____	17) 15 and 120 GCF: _____ LCM: _____	18) 66 and 198 GCF: _____ LCM: _____
13) 49 and 196 GCF: _____ LCM: _____	14) 13 and 169 GCF: _____ LCM: _____	19) 35 and 105 GCF: _____ LCM: _____	20) 25 and 175 GCF: _____ LCM: _____
15) 80 and 320 GCF: _____ LCM: _____	16) 55 and 165 GCF: _____ LCM: _____	21) 19 and 114 GCF: _____ LCM: _____	22) 32 and 224 GCF: _____ LCM: _____



ARAL Math Grade 6 Worksheet 13 (Part 1)

Find the GCF and LCM of the following set of numbers simultaneously. Use any method.

44 and 48

1) GCF: _____

2) LCM: _____

25 and 30

3) GCF: _____

4) LCM: _____

21 and 24

5) GCF: _____

6) LCM: _____

39 and 42

7) GCF: _____

8) LCM: _____

3 and 24

9) GCF: _____

10) LCM: _____

10 and 18

11) GCF: _____

12) LCM: _____

15, 24 and 27

13) GCF: _____

14) LCM: _____

15, 18 and 20

15) GCF: _____

16) LCM: _____

25, 45 and 60

17) GCF: _____

18) LCM: _____

13 and 27

19) GCF: _____

20) LCM: _____



ARAL Math Grade 6 Worksheet 13 (Part 2)

9, 14 and 25		Analyze and solve the following problems.	
21) GCF: _____	22) LCM: _____	Melissa wants to make paper bouquets. Each flower uses one sheet of colored paper. She has 12 red, 14 yellow and 16 orange colored papers. If she wants each bouquet to have equal number of flowers per color, how many bouquets can she make at the most? How many flowers per color are in each bouquet?	33)
21 and 50			34)
23) GCF: _____	24) LCM: _____	Three blinking neon signs are turned on at the same time. Each blinks every 6 seconds, 11 seconds and 25 seconds respectively. After how many seconds will they blink together?	35)
6, 17 and 35		Jona can arrange her toy collections in a box. She can either arrange 15 toys, 20 toys or 18 toys in a box. How many toys can she have at the least?	36)
25) GCF: _____	26) LCM: _____	Cathy is giving donation to calamity victims. She has 12 clothes, 28 packs of goods, and 36 kilos of rice. What is the greatest number of bags she can make if each type is equally distributed among the bags? How many of each will go into the bags?	37)
18 and 90			38)
27) GCF: _____	28) LCM: _____	The teachers will make loot bags for the awardees in a contest. Stickers come in sheets of 9, glitter pens come in packs of 12, water bottles are sold individually so they plan to buy 36 pieces. They want that each loot bag should have equal number of each of the items. How many stickers and how many glitter pens should they buy at the least?	39)
10 and 50			40)
29) GCF: _____	30) LCM: _____	Elena has 18 apples, 27 pears, and 21 bananas. She wants to make fruit baskets with the same number of each fruit in each basket. How many fruit baskets can she make at the most? Identify the number of each fruit in a basket.	41)
			42)
23 and 92		It takes approximately 12 hours to reach Albay, Bicol travelling by bus from Araneta Cubao Bus Station. Each bus takes a rest at different bus stops at different intervals. Cagsawa Liner takes a bus stop every 3 hours, Isarog Lines every 4 hours and Penafrancia Tours every 2 hours. If they all left at the same time at 12 NN, what time will they be at the bus stop at the same time?	43)
31) GCF: _____	32) LCM: _____		



ARAL Math Grade 6 Worksheet 14 (Part 1)

Shade and solve the equations using the models provided below.

1.



$$\frac{1}{3}$$

$$\frac{1}{3}$$

$$\frac{1}{3} \times \frac{1}{3} = \underline{\hspace{2cm}}$$

3.



$$\frac{3}{5}$$

$$\frac{3}{4}$$

$$\frac{3}{5} \times \frac{3}{4} = \underline{\hspace{2cm}}$$

2.



$$\frac{2}{4}$$

$$\frac{6}{8}$$

$$\frac{2}{4} \times \frac{6}{8} = \underline{\hspace{2cm}}$$

4.



$$\frac{6}{7}$$

$$\frac{2}{3}$$

$$\frac{6}{7} \times \frac{2}{3} = \underline{\hspace{2cm}}$$



ARAL Math Grade 6 Worksheet 14 (Part 2)

Shade and solve the equations using the models provided below.

5.

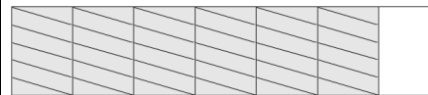


$$\frac{2}{3}$$

$$\frac{1}{2}$$

$$\frac{2}{3} \times \frac{1}{2} = \underline{\hspace{2cm}}$$

7.



$$\frac{6}{7}$$



$$\frac{4}{5}$$

$$\frac{6}{7} \times \frac{4}{5} = \underline{\hspace{2cm}}$$

6.



$$\frac{3}{6}$$



$$\frac{3}{5}$$

$$\frac{3}{6} \times \frac{3}{5} = \underline{\hspace{2cm}}$$

8.



$$\frac{8}{9}$$



$$\frac{2}{3}$$

$$\frac{8}{9} \times \frac{2}{3} = \underline{\hspace{2cm}}$$



ARAL Math Grade 6 Worksheet 15 (Part 1)

Multiplication of Fractions

To multiply fractions, simply multiply the numerators and then multiply the denominators. Reduce answer to lowest term if necessary.

Example: $\frac{4}{5} \times \frac{2}{7} = \frac{8}{35}$

Find the product. Show your solutions by following the given example. Express your answers in lowest term.

$\frac{5}{7} \times \frac{1}{4}$	1)		$\frac{2}{10} \times \frac{1}{9}$	6)	
$\frac{3}{4} \times \frac{1}{4}$	2)		$\frac{1}{3} \times \frac{2}{3}$	7)	
$\frac{6}{7} \times \frac{4}{5}$	3)		$\frac{6}{7} \times \frac{1}{7}$	8)	
$\frac{1}{2} \times \frac{3}{6}$	4)		$\frac{1}{6} \times \frac{1}{13}$	9)	
$\frac{1}{2} \times \frac{3}{6}$	5)		$\frac{1}{8} \times \frac{3}{7}$	10)	
			$\frac{2}{9} \times \frac{1}{11}$	11)	
			$\frac{3}{10} \times \frac{7}{8}$	12)	
			$\frac{5}{7} \times \frac{2}{11}$	13)	
			$\frac{2}{3} \times \frac{4}{9}$	14)	
			$\frac{1}{4} \times \frac{2}{7}$	15)	





ARAL Math Grade 6 Worksheet 15 (Part 2)

Multiplication of Fractions In multiplying fractions wherein the numerator of the first fraction has a common factor with the denominator of the other fraction or vice versa, we can do cross cancellation by dividing them with their GCF. <i>Example:</i> 1) $\frac{4}{9} \times \frac{1}{10} = \frac{\cancel{4}^2}{9} \times \frac{1}{\cancel{10}_5} = \frac{2}{45}$ 2) $\frac{4}{15} \times \frac{5}{12} = \frac{\cancel{4}^1}{\cancel{15}_3} \times \frac{\cancel{5}_5}{\cancel{12}_3} = \frac{1}{9}$ <i>(the GCF of 4 & 10 is 2, 4÷2=2, 10÷2=5)</i> <i>(the GCF of 4 & 12 is 4, 4÷4=1, 12÷3=3)</i> <i>(the GCF of 5 & 15 is 5, 5÷5=1, 15÷5=3)</i>	
Find the product using cross cancellation. Show your solutions by following the given example. Express your answers in lowest term.	
$\frac{2}{9} \times \frac{3}{4}$	21)
$\frac{2}{10} \times \frac{2}{3}$	22)
$\frac{1}{4} \times \frac{2}{3}$	23)
$\frac{1}{3} \times \frac{3}{5}$	24)
$\frac{1}{2} \times \frac{2}{5}$	25)
	26)
	27)
	28)
	29)
	30)





ARAL Math Grade 6 Worksheet 16 (Part 1)

Multiplication of Whole Numbers & Fractions

To multiply whole numbers and fractions, simply multiply the whole number and the numerator then copy the denominator. Cancellation can be done also if the whole number and the denominator have a common factor. Reduce answer to lowest term if necessary.

Example:

$$1) \quad 5 \times \frac{3}{7} = \frac{15}{7} = 2\frac{1}{7} \quad 2) \quad 8 \times \frac{5}{6} = \overset{4}{\cancel{8}} \times \frac{5}{\cancel{6}_3} = \frac{20}{3} = 6\frac{2}{3}$$

Multiply. Show your solutions by following the given example. Express your answers in lowest term.

$9 \times \frac{2}{5}$	1)	$10 \times \frac{1}{2}$	6)
$5 \times \frac{1}{4}$	2)	$2 \times \frac{4}{9}$	7)
$2 \times \frac{1}{2}$	3)	$\frac{3}{9} \times 16$	8)
$8 \times \frac{1}{2}$	4)	$\frac{11}{14} \times 21$	9)
$3 \times \frac{2}{3}$	5)	$\frac{8}{14} \times 24$	10)
		$\frac{2}{5} \times 18$	11)
		$\frac{4}{7} \times 6$	12)
		$5 \times \frac{2}{5}$	13)
		$10 \times \frac{3}{20}$	14)
		$\frac{4}{6} \times 9$	15)



ARAL Math Grade 6 Worksheet 16 (Part 2)

Multiplication of Mixed Numbers To multiply mixed numbers, first, change them to improper fractions then multiply. Cancellation may be done also. Reduce answer to lowest term if necessary. <i>Example:</i> $1) \quad 2\frac{1}{9} \times 1\frac{2}{3} = \frac{19}{9} \times \frac{5}{3} = \frac{95}{27} = 3\frac{14}{27} \quad 2) \quad 2\frac{3}{7} \times 3\frac{1}{2} = \frac{17}{7} \times \frac{7}{2} = \frac{17}{2} = 8\frac{1}{2}$	
Multiply. Show your solutions by following the given example. Express your answers in lowest term.	
$2\frac{1}{2} \times 4\frac{2}{5}$	16)
$2\frac{1}{2} \times 3\frac{4}{5}$	17)
$2\frac{1}{5} \times 3\frac{1}{4}$	18)
$3\frac{4}{5} \times 4\frac{1}{2}$	19)
$3\frac{1}{3} \times 2\frac{9}{10}$	20)
$4\frac{4}{5} \times 2\frac{7}{10}$	21)
$4\frac{4}{5} \times 2\frac{1}{3}$	22)
$2\frac{2}{5} \times 2\frac{1}{2}$	23)
$4\frac{1}{3} \times 3\frac{1}{2}$	24)
$3\frac{1}{4} \times 2\frac{5}{9}$	25)
$3\frac{5}{8} \times 4\frac{1}{2}$	26)
$5\frac{4}{5} \times 2\frac{2}{3}$	27)
$5\frac{1}{2} \times 4\frac{1}{2}$	28)
$2\frac{4}{7} \times 3\frac{8}{9}$	29)
$6\frac{1}{2} \times 3\frac{2}{5}$	30)



ARAL Math Grade 6 Worksheet 17 (Part 1)

Find the product. Express your answers in lowest term.			
$\frac{1}{2} \times \frac{1}{9}$	1)	$\frac{3}{7} \times 4$	11)
$\frac{3}{11} \times \frac{5}{13}$	2)	$18 \times \frac{2}{9}$	12)
$\frac{5}{13} \times \frac{3}{7}$	3)	$20 \times \frac{4}{5}$	13)
$\frac{5}{7} \times \frac{9}{11}$	4)	$\frac{5}{12} \times 30$	14)
$\frac{3}{10} \times \frac{4}{9}$	5)	$\frac{6}{8} \times 14$	15)
$\frac{2}{3} \times \frac{9}{14}$	6)	$2\frac{4}{9} \times 4\frac{1}{8}$	16)
$\frac{5}{8} \times \frac{10}{25}$	7)	$3\frac{1}{5} \times 3\frac{1}{4}$	17)
$\frac{6}{18} \times \frac{3}{4}$	8)	$5\frac{2}{9} \times 4\frac{7}{8}$	18)
$\frac{3}{4} \times \frac{4}{9}$	9)	$3\frac{1}{4} \times 3\frac{6}{7}$	19)
$\frac{3}{5} \times \frac{1}{18}$	10)	$3\frac{5}{6} \times 6\frac{1}{2}$	20)



ARAL Math Grade 6 Worksheet 17 (Part 2)

Analyze and answer the following word problems. Show your solutions.			
$\frac{1}{4}$ of $2\frac{1}{2}$ is what number?	21)	Dawn has $3\frac{1}{2}$ cookies. Each cost 5. What is the cost of all the cookies?	26)
What is the product of $2\frac{2}{3}$ and $\frac{3}{4}$?	22)	Anna's height $1\frac{1}{3}$ of Jenny's height. Jenny is $5\frac{1}{2}$ feet tall. What is Anna's height?	27)
If you triple, $2\frac{4}{5}$ what number will you get?	23)	Gino's score is $2\frac{1}{8}$ of Jona's score. Jona scored $56\frac{1}{4}$. What is Gino's score?	28)
Harald has three bucket of fries. Each bucket contains $10\frac{2}{3}$ fries. How many fries does Harald have?	24)	Allan's weight is $3\frac{1}{2}$ times heavier than Nico's weight. Nico's weight is $50\frac{1}{4}kg$ What is Allan's weight?	29)
On Monday a team of street sweepers cleaned $\frac{3}{5}$ of a city block. Tuesday, the team cleaned $2\frac{2}{5}$ times as many blocks as on Monday. How many city blocks did the street sweepers clean on Tuesday?	25)	Bambi's foot size is $1\frac{1}{2}$ of Dona's foot size. Dona's foot size is $5\frac{1}{2}inches$ What is Bambi's foot size?	30)



ARAL Math Grade 6 Worksheet 18 (Part 1)

Multiplication of Three Fractions & Mixed Numbers

To multiply three or more fractions and mixed numbers, follow the rules learned in multiplication of fractions from the previous worksheets. Do cancellation simultaneously if possible.

Example:

$$1) \quad \frac{3}{8} \times \frac{4}{7} \times \frac{7}{11} = \frac{3}{\cancel{8}_2} \times \frac{\cancel{4}^1}{7} \times \frac{7}{11} = \frac{3}{22}$$

$$2) \quad 6 \times 4\frac{2}{3} \times 2\frac{1}{7} = \cancel{6}^2 \times \frac{2}{\cancel{3}_1} \times \frac{\cancel{14}^2}{7} \times \frac{15}{1} = 60$$

Multiply the following. Do cancellation if possible.

$\frac{3}{4} \times \frac{2}{7} \times \frac{2}{9}$	1)	$\frac{3}{10} \times \frac{4}{9} \times \frac{2}{7}$	5)
$\frac{4}{5} \times \frac{1}{4} \times \frac{5}{6}$	2)	$\frac{2}{5} \times \frac{1}{4} \times \frac{5}{9}$	6)
$\frac{3}{4} \times \frac{4}{7} \times \frac{2}{6}$	3)	$\frac{3}{4} \times \frac{1}{2} \times \frac{6}{9}$	7)
$\frac{4}{10} \times \frac{5}{9} \times \frac{3}{8}$	4)	$\frac{2}{5} \times \frac{3}{7} \times \frac{2}{10}$	8)
		$\frac{2}{9} \times \frac{3}{10} \times \frac{4}{8}$	9)
		$\frac{2}{7} \times \frac{3}{5} \times \frac{7}{9}$	10)
		$\frac{4}{10} \times \frac{10}{20} \times \frac{7}{8}$	11)



ARAL Math Grade 6 Worksheet 18 (Part 2)

$5 \times \frac{3}{5} \times \frac{3}{10}$	12)	$3\frac{3}{4} \times \frac{1}{3} \times 2\frac{2}{3}$	19)
$6 \times \frac{4}{6} \times \frac{5}{8}$	13)	$1\frac{1}{2} \times 2\frac{1}{3} \times 3\frac{1}{4}$	20)
$7 \times \frac{6}{7} \times \frac{3}{8}$	14)	$5\frac{1}{2} \times \frac{3}{8} \times 1\frac{2}{9}$	21)
$8 \times \frac{3}{4} \times \frac{2}{15}$	15)	$8 \times 1\frac{1}{8} \times 2\frac{2}{3}$	22)
$9 \times \frac{1}{6} \times \frac{8}{10}$	16)	$9 \times 2\frac{3}{5} \times 1\frac{5}{9}$	23)
$3\frac{1}{4} \times \frac{1}{6} \times \frac{3}{5}$	17)	$\frac{4}{5} \times 2\frac{2}{5} \times 10$	24)
$2\frac{1}{7} \times 5\frac{3}{5} \times 4\frac{2}{10}$	18)	$\frac{3}{8} \times 3\frac{3}{4} \times \frac{8}{9}$	25)

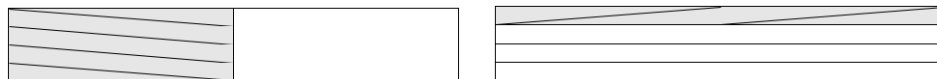




ARAL Math Grade 6 Worksheet 19 (Part 1)

Shade and solve the equations using the models provided below.

1.

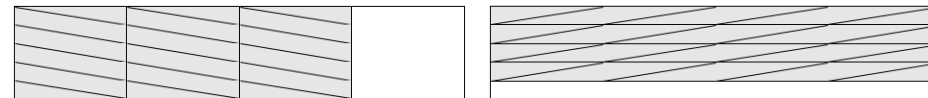


$$\frac{1}{2}$$

$$\frac{1}{4}$$

$$\frac{1}{2} \div \frac{1}{4} = \underline{\hspace{2cm}}$$

3.



$$\frac{3}{4}$$

$$\frac{4}{5}$$

$$\frac{3}{4} \div \frac{4}{5} = \underline{\hspace{2cm}}$$

2.



$$\frac{5}{6}$$

$$\frac{1}{2}$$

$$\frac{5}{6} \div \frac{1}{2} = \underline{\hspace{2cm}}$$

4.



$$\frac{5}{8}$$

$$\frac{2}{3}$$

$$\frac{5}{8} \div \frac{2}{3} = \underline{\hspace{2cm}}$$



ARAL Math Grade 6 Worksheet 19 (Part 2)

Shade and solve the equations using the models provided below.

5.

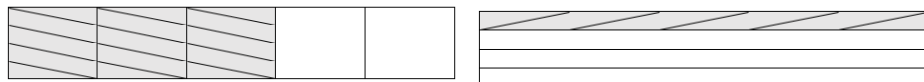


$$\frac{1}{2}$$

$$\frac{2}{3}$$

$$\frac{1}{2} \div \frac{2}{3} = \underline{\hspace{2cm}}$$

6.



$$\frac{3}{5}$$

$$\frac{1}{4}$$

$$\frac{3}{5} \div \frac{1}{4} = \underline{\hspace{2cm}}$$

7.



$$\frac{2}{3}$$

$$\frac{1}{6}$$

$$\frac{2}{3} \div \frac{1}{6} = \underline{\hspace{2cm}}$$

8.



$$\frac{3}{4}$$

$$\frac{2}{3}$$

$$\frac{3}{4} \div \frac{2}{3} = \underline{\hspace{2cm}}$$



ARAL Math Grade 6 Worksheet 20 (Part 1)

Reciprocals

To get the reciprocal of a fraction, just turn it upside down. In other words, swap the numerator and denominator.

The reciprocal of $\frac{a}{b} \rightarrow \frac{b}{a}$

Example:

1) $\frac{2}{3} \rightarrow \frac{3}{2}$ 2) $\frac{1}{3} \rightarrow \frac{3}{1} \rightarrow 3$ 3) $\frac{18}{17} \rightarrow \frac{17}{18}$ 4) $6 \rightarrow \frac{1}{6}$

For mixed number, convert it first to its improper form.

$$1\frac{1}{2} \rightarrow \frac{3}{2} \rightarrow \frac{2}{3}$$

Identify the reciprocals of the following.

$\frac{4}{5}$	1)	$\frac{3}{5}$	6)
$\frac{7}{6}$	2)	$2\frac{2}{8}$	7)
$\frac{4}{3}$	3)	$1\frac{2}{3}$	8)
$\frac{10}{12}$	4)	$6\frac{7}{11}$	9)
2	5)	$3\frac{1}{3}$	10)
		$1\frac{2}{9}$	11)
		$3\frac{3}{6}$	12)
		$1\frac{3}{4}$	13)
		$6\frac{2}{5}$	14)
		$1\frac{9}{10}$	15)





ARAL Math Grade 6 Worksheet 20 (Part 2)

Division of Fractions To divide fractions, multiply the dividend by the reciprocal of the divisor. So first, find the reciprocal of the divisor then proceed to multiplication of fractions. Reduce answer to lowest term if necessary. <i>Example:</i> $\frac{3}{4} \div \frac{2}{5} = \frac{3}{4} \times \frac{5}{2} = \frac{15}{8} = 1\frac{7}{8}$	
Find the quotient. Show your solutions by following the given example. Reduce answer to lowest term if necessary.	$\frac{2}{9} \div \frac{2}{7}$
	$\frac{1}{2} \div \frac{5}{8}$
	$\frac{1}{5} \div \frac{1}{9}$
	$\frac{2}{5} \div \frac{3}{10}$
	$\frac{7}{9} \div \frac{2}{11}$
	$\frac{9}{10} \div \frac{5}{12}$
$\frac{4}{5} \div \frac{1}{2}$	$\frac{1}{4} \div \frac{2}{13}$
$\frac{2}{7} \div \frac{1}{3}$	$\frac{2}{3} \div \frac{3}{4}$
$\frac{3}{8} \div \frac{1}{4}$	$\frac{2}{9} \div \frac{4}{15}$
$\frac{6}{7} \div \frac{1}{5}$	$\frac{5}{14} \div \frac{5}{9}$
$\frac{4}{5} \div \frac{5}{6}$	



ARAL Math Grade 6 Worksheet 21 (Part 1)

Division of Fractions & Whole Numbers

To divide a fraction by a whole number, and vice versa, same rules apply.
Reduce answer to lowest term if necessary

Example:

$$1) \quad \frac{7}{9} \div 5 = \frac{7}{9} \times \frac{1}{5} = \frac{7}{45} \quad 2) \quad 12 \div \frac{4}{7} = 12 \times \frac{7}{4} = 21$$

Find the quotient. Show your solutions by following the given example. Reduce answer to lowest term if necessary.

$\frac{4}{5} \div 2$	1)	$\frac{2}{9} \div 7$	6)
$\frac{2}{7} \div 3$	2)	$\frac{1}{2} \div 8$	7)
$\frac{3}{8} \div 4$	3)	$\frac{1}{5} \div 9$	8)
$\frac{6}{7} \div 5$	4)	$\frac{2}{5} \div 10$	9)
$\frac{4}{5} \div 6$	5)	$\frac{7}{9} \div 11$	10)
		$\frac{9}{10} \div 12$	11)
		$\frac{1}{4} \div 13$	12)





ARAL Math Grade 6 Worksheet 21 (Part 2)

$\frac{2}{3} \div 14$	13)	$2 \div \frac{1}{3}$	22)
$\frac{2}{9} \div 15$	14)	$3 \div \frac{1}{4}$	23)
$5 \div \frac{5}{9}$	15)	$6 \div \frac{1}{5}$	24)
$4 \div \frac{2}{7}$	16)	$5 \div \frac{5}{6}$	25)
$7 \div \frac{4}{7}$	17)	$9 \div \frac{2}{7}$	26)
$1 \div \frac{2}{9}$	18)	$1 \div \frac{5}{8}$	27)
$4 \div \frac{1}{2}$	19)	$5 \div \frac{1}{9}$	28)
$9 \div \frac{5}{6}$	20)	$2 \div \frac{3}{10}$	29)
$5 \div \frac{1}{2}$	21)	$7 \div \frac{2}{11}$	30)



ARAL Math Grade 6 Worksheet 22 (Part 1)

Division of Mixed Numbers

To divide mixed numbers, change them first to improper fractions. Then multiply the dividend by the reciprocal of the divisor. Reduce answer to lowest term if necessary.

Example:

$$5\frac{4}{5} \div 2\frac{1}{3} = \frac{29}{5} \div \frac{7}{3} = \frac{29}{5} \times \frac{3}{7} = \frac{87}{35} = 2\frac{17}{35}$$

Find the quotient. Show your solutions by following the given example. Reduce answer to lowest term if necessary.

$2 \div \frac{1}{8}$	1)	$4 \div \frac{5}{8}$	6)
$3 \div \frac{3}{5}$	2)	$\frac{1}{10} \div 4$	7)
$2 \div \frac{2}{3}$	3)	$\frac{1}{8} \div 3$	8)
$3 \div \frac{1}{2}$	4)	$\frac{4}{5} \div 3$	9)
$4 \div \frac{3}{7}$	5)	$\frac{1}{7} \div 4$	10)
		$\frac{7}{9} \div 3$	11)
		$\frac{7}{8} \div 5$	12)





ARAL Math Grade 6 Worksheet 22 (Part 2)

$4 \div \frac{1}{2}$	13)	$\frac{1}{2} \div 8$	22)
$3 \div \frac{2}{7}$	14)	$\frac{1}{8} \div 3$	23)
$5 \div \frac{3}{10}$	15)	$\frac{5}{7} \div 8$	24)
$6 \div \frac{4}{9}$	16)	$\frac{2}{3} \div 7$	25)
$5 \div \frac{4}{5}$	17)	$\frac{5}{9} \div 6$	26)
$3 \div \frac{1}{3}$	18)	$\frac{3}{8} \div 6$	27)
$7 \div \frac{7}{10}$	19)	$\frac{3}{10} \div 4$	28)
$8 \div \frac{5}{9}$	20)	$\frac{3}{8} \div 5$	29)
$6 \div \frac{7}{8}$	21)	$\frac{5}{8} \div 9$	30)





ARAL Math Grade 6 Worksheet 23 (Part 1)

Find the quotient.			
$\frac{2}{7} \div \frac{1}{2}$	1)	$\frac{3}{5} \div 5$	11)
$\frac{5}{9} \div \frac{1}{3}$	2)	$3 \div \frac{2}{7}$	12)
$\frac{3}{8} \div \frac{2}{5}$	3)	$4 \div \frac{5}{6}$	13)
$\frac{2}{5} \div 8$	4)	$\frac{2}{3} \div 4$	14)
$\frac{3}{7} \div 10$	5)	$9 \div \frac{5}{8}$	15)
$\frac{3}{11} \div 12$	6)	$\frac{1}{10} \div 4$	16)
$4 \div \frac{1}{7}$	7)	$3 \div \frac{1}{8}$	17)
$2 \div \frac{5}{9}$	8)	$\frac{2}{5} \div 8$	18)
$7 \div \frac{2}{3}$	9)	$10 \div \frac{1}{7}$	19)
$\frac{2}{3} \div 5$	10)	$\frac{7}{9} \div 8$	20)





ARAL Math Grade 6 Worksheet 23 (Part 2)

Analyze and answer the following word problems. Show your solutions and reduce answers to lowest terms.			
Jessa has $\frac{2}{3}$ cakes left in her house and she wants to divide it equally among her 6 friends, what part will each of her friend receive?	21)	Lenny has already written 12 novels. If she writes $\frac{1}{2}$ of a novel every month, how many months did she take to finish all the 12?	26)
The Carla is baking cookies for her friends. A batch of cookies needs 3 pounds of chocolate chips. The average weight of a chocolate chip is $\frac{1}{10}$ pounds?	22)	Icko can memorize the poem in $\frac{8}{9}$ minutes. Steph can memorize it in $\frac{1}{3}$ minutes. How many times is Steph faster in memorizing than Kiko?	27)
If the total weight of Marie's laundry is $\frac{1}{5}$ kilos, and she pays the laundry shop P25, how much is the laundry per kilo?	23)	Many computer addicts spend at least P40 in net café's. If one student plays computer games for $\frac{4}{5}$ hours, how much is the probable hourly rate?	28)
Each block is $\frac{1}{4}$ ft high. If the total height of blocks put on top of each other is $\frac{9}{10}$ ft how many blocks are there?	24)	The total weight of the books is 10 kg. If each book weighs $\frac{5}{8}$ kg, how many books are there?	29)
You only have $\frac{3}{4}$ hours left for your exam, and you still have 8 questions unanswered, how many minutes should you allot for each question?	25)	How many small bottles will you need if each bottle can only contain $\frac{1}{4}$ tablespoons of salt, and you have $\frac{1}{2}$ tablespoons of salt?	30)





ARAL Math Grade 6 Worksheet 24 (Part 1)

Division of Three Fractions & Mixed Numbers

To divide three or more fractions and mixed numbers, follow the rules learned in division of fractions from the previous worksheets. Also, all divisors are changed to its reciprocal before multiplying. Do cancellation simultaneously if possible.

Example:

$$1) \quad \frac{5}{8} \div \frac{3}{4} \div \frac{5}{9} = \frac{\cancel{5}^1}{\cancel{8}_2} \times \frac{\cancel{4}^1}{\cancel{3}_1} \times \frac{\cancel{9}^3}{\cancel{5}_1} = \frac{3}{2} \text{ or } 1\frac{1}{2}$$

$$2) \quad 2\frac{2}{7} \div 2\frac{2}{3} \div 1\frac{3}{7} = \frac{\cancel{16}^2}{\cancel{7}_1} \times \frac{\cancel{3}^1}{\cancel{8}_1} \times \frac{\cancel{7}^1}{\cancel{10}_5} = \frac{6}{10} \text{ or } \frac{3}{5}$$

Divide the following. Do cancellation if possible.

$\frac{4}{5} \div \frac{8}{15} \div \frac{2}{3}$	1)	$\frac{5}{6} \div \frac{1}{10} \div \frac{2}{3}$	5)
$\frac{1}{3} \div \frac{4}{5} \div \frac{10}{21}$	2)	$\frac{1}{6} \div \frac{3}{8} \div \frac{4}{7}$	6)
$\frac{1}{5} \div \frac{3}{4} \div \frac{8}{15}$	3)	$\frac{11}{12} \div \frac{1}{9} \div \frac{11}{14}$	7)
$\frac{1}{2} \div \frac{5}{6} \div \frac{10}{11}$	4)	$\frac{1}{15} \div \frac{3}{5} \div \frac{3}{7}$	8)
		$\frac{2}{3} \div \frac{3}{14} \div \frac{9}{10}$	9)
		$\frac{3}{4} \div \frac{2}{3} \div \frac{1}{9}$	10)
		$\frac{1}{2} \div \frac{2}{5} \div 3$	11)



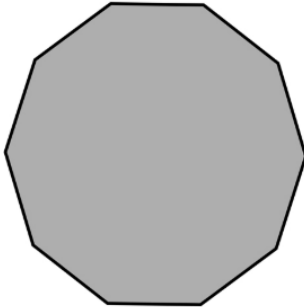
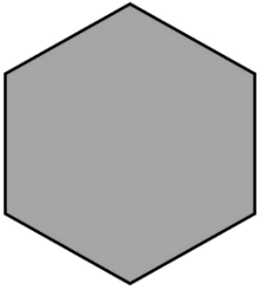
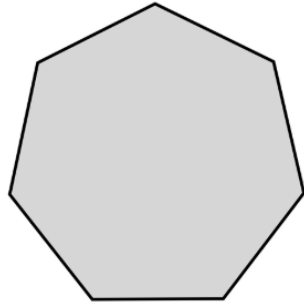
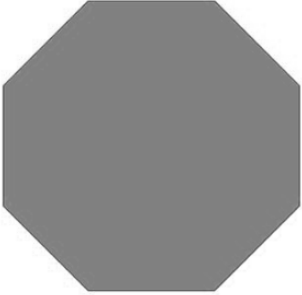
ARAL Math Grade 6 Worksheet 24 (Part 2)

$2 \div \frac{5}{8} \div 3$	12)		$8 \div \frac{4}{5} \div 2$	19)	
$\frac{5}{9} \div 3 \div \frac{1}{3}$	13)		$9 \div \frac{3}{7} \div \frac{3}{4}$	20)	
$\frac{2}{3} \div 6 \div 5$	14)		$10 \div \frac{4}{5} \div \frac{1}{3}$	21)	
$\frac{3}{4} \div 4 \div \frac{2}{5}$	15)		$\frac{5}{7} \div \frac{3}{7} \div 5$	22)	
$\frac{2}{3} \div \frac{4}{5} \div \frac{2}{5}$	16)		$\frac{3}{8} \div \frac{1}{5} \div 6$	23)	
$3 \div \frac{5}{6} \div 4$	17)		$\frac{2}{9} \div 8 \div \frac{2}{5}$	24)	
$4 \div \frac{6}{7} \div \frac{2}{7}$	18)		$\frac{5}{6} \div 10 \div \frac{3}{4}$	25)	



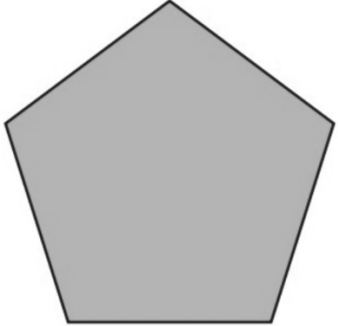
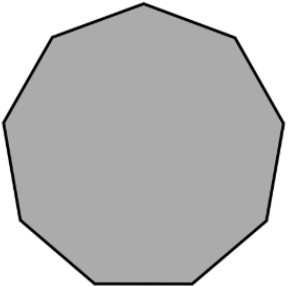
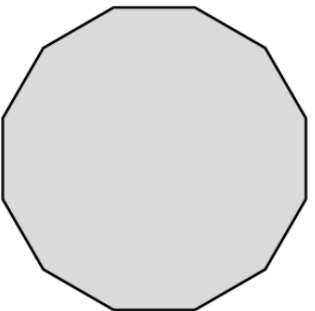


ARAL Math Grade 6 Worksheet 25 (Part 1)

Fill out the table below.							
	Polygon Name	Figure	Number of Sides		Polygon Name	Figure	Number of Sides
1.	Quadrilateral			4.			10
2.	Hexagon			5.	Heptagon		
3.	Octagon			6.	Nonagon		9



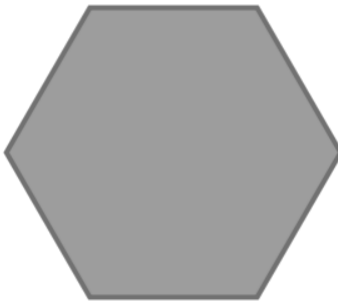
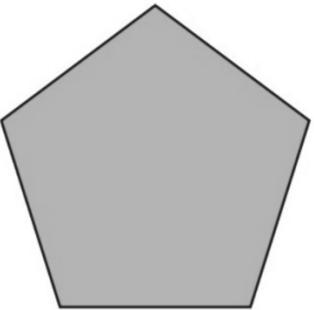
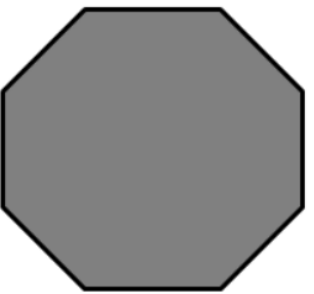
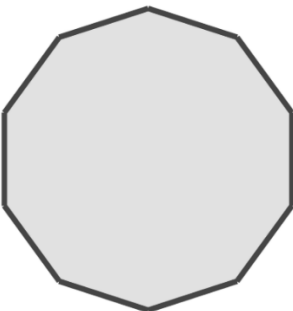
ARAL Math Grade 6 Worksheet 25 (Part 2)

Fill out the table below.							
	Polygon Name	Figure	Number of Sides		Polygon Name	Figure	Number of Sides
7.	Pentagon			10.			9
8.	Decagon		10	11.	Octagon		8
9.	Hendecagon			12.	Dodecagon		



ARAL Math Grade 6 Worksheet 25 (Part 3)

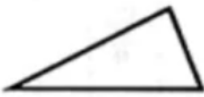
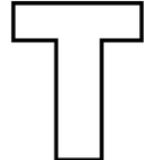
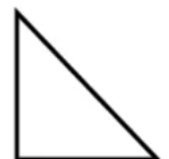
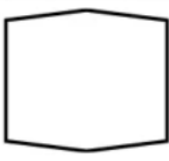
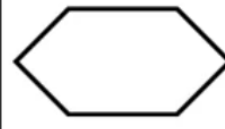
Fill out the table below.

	Polygon Name	Figure	Number of Sides		Polygon Name	Figure	Number of Sides
13.			6	16.	Pentagon		
14.	Heptagon		7	17.			8
15.	Decagon			18.	Quadrilateral		4



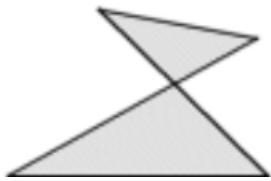
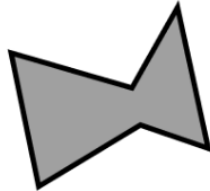
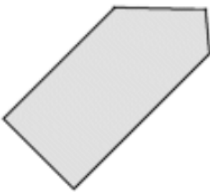
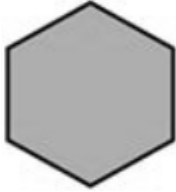
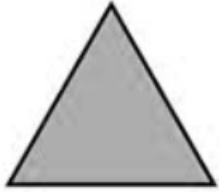
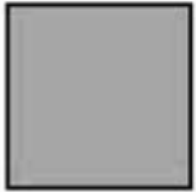
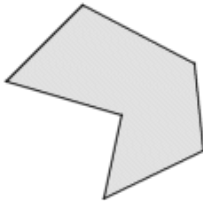


ARAL Math Grade 6 Worksheet 26 (Part 1)

POLYGONS REGULAR POLYGONS A regular polygon's sides are all of the same length and its angles are equal. For example, a square is a regular polygon because it has equal angles and equal side lengths. IRREGULAR POLYGONS An irregular polygon on the other hand, is a polygon whose sides are not of the same sizes and whose angles are not equal.  Square  Quadrilateral			
Tell whether the given polygons are regular or irregular.			
	1)		5)
	2)		6)
	3)		7)
	4)		8)
	9)		15)
	10)		16)
	11)		17)
	12)		18)
	13)		19)
	14)		20)

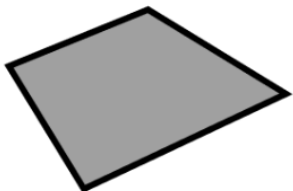
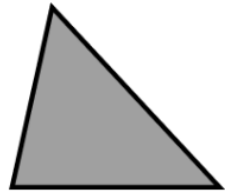
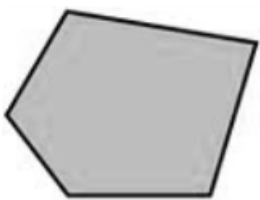
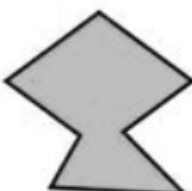
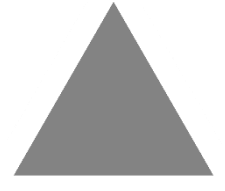


ARAL Math Grade 6 Worksheet 26 (Part 2)

Tell whether the given polygons are regular or irregular.			
	21.		26.
	22.		27.
	23.		28.
	24.		29.
	25.		30.



ARAL Math Grade 6 Worksheet 26 (Part 3)

Tell whether the given polygons are regular or irregular.			
	31.		36.
	32.		37.
	33.		38.
	34.		39.
	35.		40.



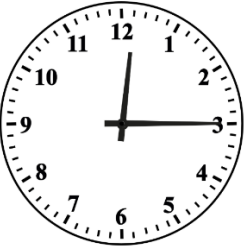
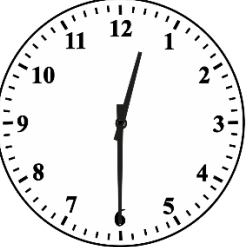
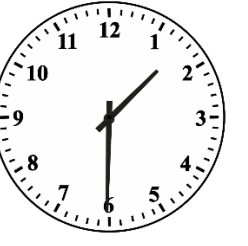
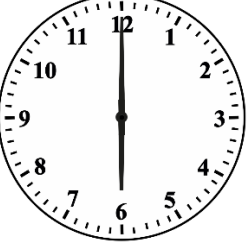
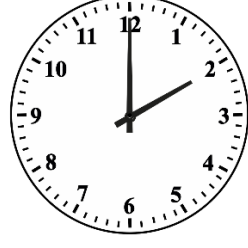
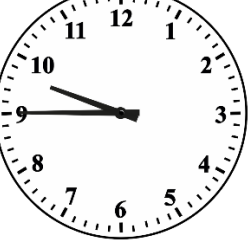
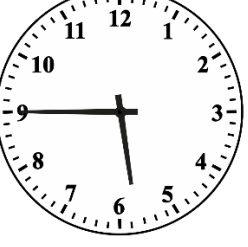
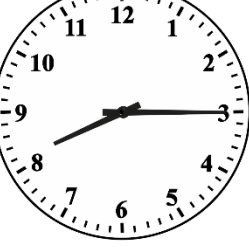
ARAL Math Grade 6 Worksheet 27

Fill out the table below.			
12-hour format	24-hour format	12-hour format	24-hour format
12:00 AM	1.	12:00 PM	13.
1:00 AM	2.	1:00 PM	14.
2:00 AM	3.	2:00 PM	15.
3:00 AM	4.	3:00 PM	16.
4:00 AM	5.	4:00 PM	17.
5:00 AM	6.	5:00 PM	18.
6:00 AM	7.	6:00 PM	19.
7:00 AM	8.	7:00 PM	20.
8:00 AM	9.	8:00 PM	21.
9:00 AM	10.	9:00 PM	22.
10:00 AM	11.	10:00 PM	23.
11:00 AM	12.	11:00 PM	24.



ARAL Math Grade 6 Worksheet 28 (Part 1)

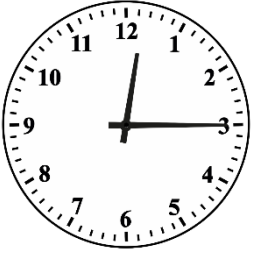
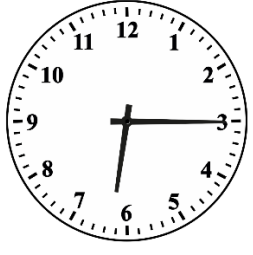
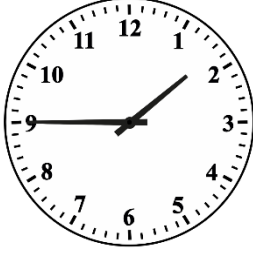
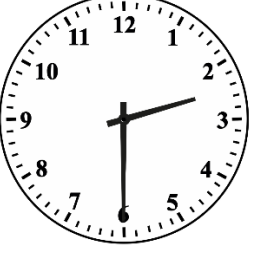
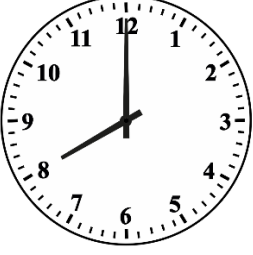
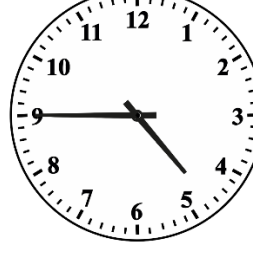
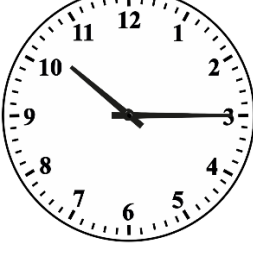
Write the time in 24-hour format.

 AM	1.	 AM	5.
 AM	2.	 PM	6.
 PM	3.	 PM	7.
 PM	4.	 PM	8.



ARAL Math Grade 6 Worksheet 28 (Part 2)

Write the time in 24-hour format.

 PM	9.	 AM	13.
 AM	10.	 PM	14.
 AM	11.	 AM	15.
 PM	12.	 PM	16.



ARAL Math Grade 6 Worksheet 29 (Part 1)

Convert the following times from 12-hour format to 24-hour format and vice versa.			
12-hour format	24-hour format	12-hour format	24-hour format
12:10 AM	1.	13.	1650
7:45 PM	2.	14.	2235
5:05 AM	3.	15.	1800
4:45 PM	4.	16.	1545
9:30 AM	5.	17.	1330
2:15 AM	6.	18.	0000
8:25 PM	7.	19.	2015
1:55 PM	8.	20.	1755
8:00 AM	9.	21.	2140
10:15 PM	10.	22.	0615
12:00 PM	11.	23.	0410
3:40 AM	12.	24.	2355



ARAL Math Grade 6 Worksheet 29 (Part 2)

Convert the following times from 12-hour format to 24-hour format and vice versa.			
12-hour format	24-hour format	12-hour format	24-hour format
2:50 AM	25.	37.	0545
7:35 PM	26.	38.	1950
11:48 PM	27.	39.	1200
7:00 AM	28.	40.	1715
9:00 PM	29.	41.	0910
10:15 PM	30.	42.	0010
12:15 AM	31.	43.	1445
8:45 AM	32.	44.	2230
1:30 PM	33.	45.	1115
4:15 PM	34.	46.	2325
3:35 PM	35.	47.	1650
5:00 AM	36.	48.	0335





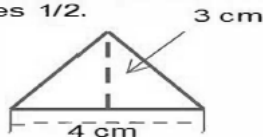
ARAL Math Grade 6 Worksheet 30 (Part 1)

AREA of a TRIANGLE

The **area of a triangle** can be computed using the following formula:

$$A = \frac{1}{2}bh$$

Multiply the length of the base with the height of the triangle times $\frac{1}{2}$.

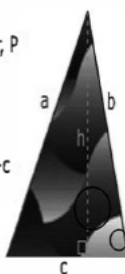


The height of this triangle is 3 cm and the base is 4 cm. **Thus its area is**
 $A = 4 \times 3 \times \frac{1}{2} = 6$ square cm.

Area, A
Perimeter, P

$$A = \frac{1}{2}c \cdot h$$

$$P = a + b + c$$



Calculate for the area of a triangle. Label your answers.

Base = 12 in, Height = 6 in

5)

Base = 8 in, Height = 8 in

6)

Base = 19 in, Height = 4 in

7)

Base = 22 in, Height = 10 in

8)

Base = 31 in, Height = 24 in

9)

Base = 35 in, Height = 12 in

10)

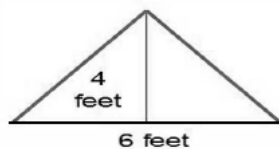
Base = 22 in, Height = 6 in

11)

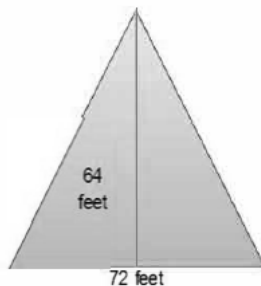
Base = 42 in, Height = 14 in

12)

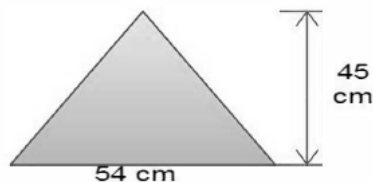
Find the area.



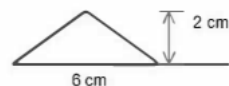
1)



3)



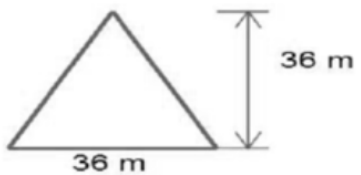
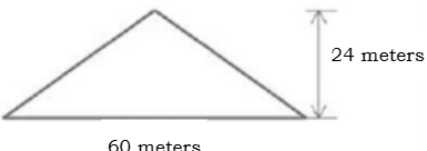
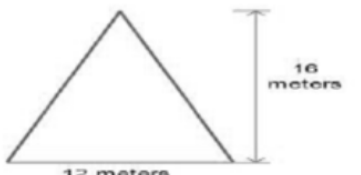
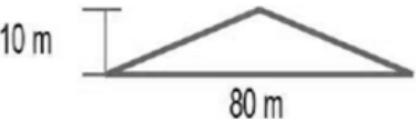
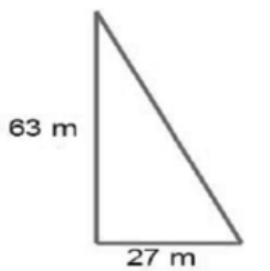
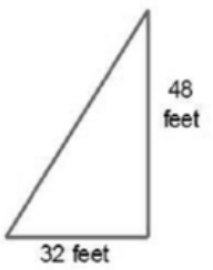
2)



4)



ARAL Math Grade 6 Worksheet 30 (Part 2)

Calculate for the area of a triangle. Label your answers.		Calculate for the area of a triangle. Label your answers.	
 13)	 14)	Base = 18 in, Height = 10 in 19)	Base = 40 in, Height = 36 in 20)
 15)	 16)	Base = 32 in, Height = 16 in 21)	Base = 17 in, Height = 5 in 22)
 17)	 18)	Base = 14 in, Height = 9 in 23)	Base = 35 in, Height = 21 in 24)
		Base = 42 in, Height = 23 in 25)	Base = 53 in, Height = 33 in 26)



ARAL Math Grade 6 Worksheet 31 (Part 1)

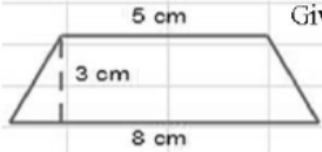
AREA OF A TRAPEZOID

The area of a trapezoid can be computed using the formula:

$$A = \frac{(b_1 + b_2) \times h}{2}$$

The formula means that the two bases are added and then multiplied by the height then all divided by two.

EXAMPLE:



Given:

$$b_1 = 5 \text{ cm}$$

$$b_2 = 8 \text{ cm}$$

$$h = 3 \text{ cm}$$

$$A = \frac{(b_1 + b_2) \times h}{2}$$

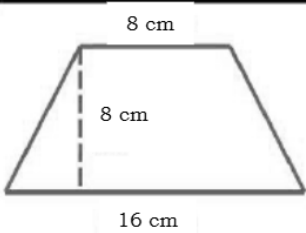
$$A = \frac{(5 + 8) \times 3}{2}$$

$$A = 19.5 \text{ cm}^2$$

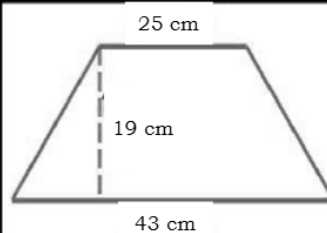
Find the area of the trapezoids given the following.

Upper Base	Lower Base	Height	Area
14	16	8	1)
7	9	5	2)
24	63	35	3)
150	180	17	4)
120	135	55	5)

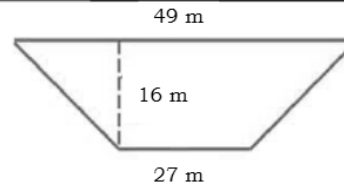
Compute for the area of the following trapezoids.



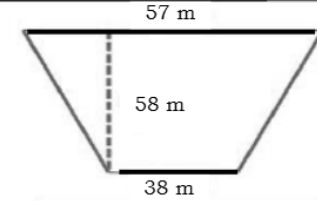
6)



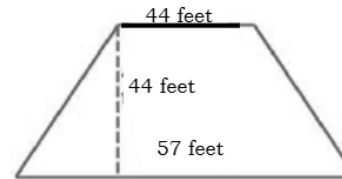
7)



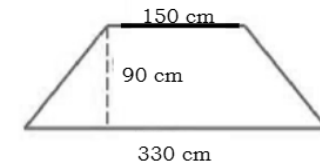
8)



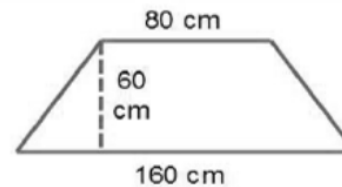
9)



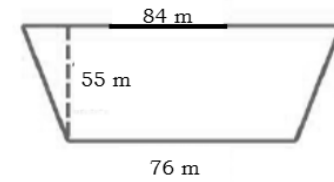
10)



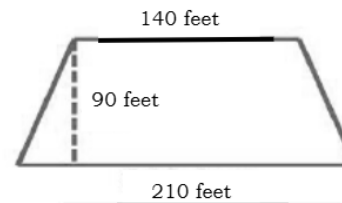
11)



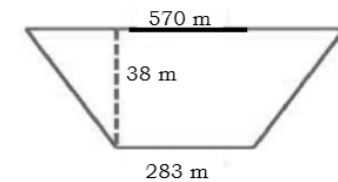
12)



13)



14)

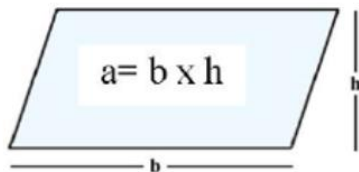


15)



ARAL Math Grade 6 Worksheet 31 (Part 2)

Area of a Parallelogram



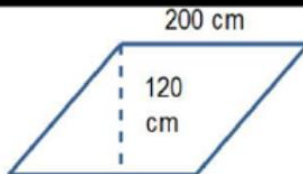
area of a parallelogram = base (b) x height (h)

EXAMPLE: A parallelogram has a base of length 60 inches and a height of 40 inches, find its area.

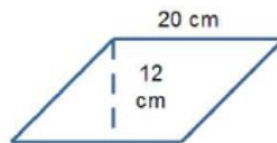
area of a parallelogram = 60 in x 40 in

= 2400 square inches

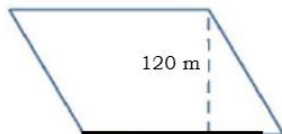
Find the area of the given parallelograms.



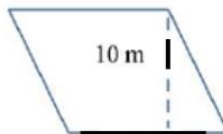
16)



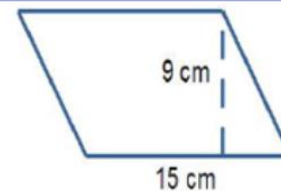
17)



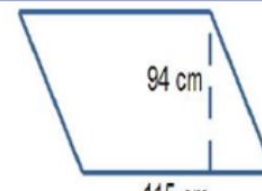
18)



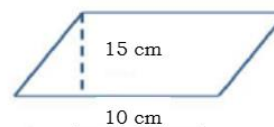
19)



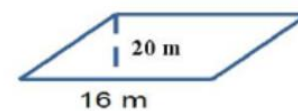
20)



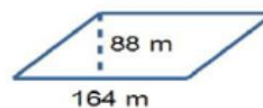
21)



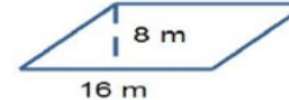
22)



23)



24)



25)

Find the area of the parallelogram given the following base and height.
(Area of parallelogram = base x height)

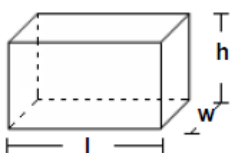
Base	Height	Area
40	60	26)
65	34	27)
220	46	28)
289	92	29)
125	59	30)



ARAL Math Grade 6 Worksheet 32 (Part 1)

VOLUME OF A RECTANGULAR PRISM:

FORMULA: $V_{\text{rectangular prism}} = B \text{ (area of the base) } \times \text{height}$
 $= \text{length (l) } \times \text{width (w) } \times \text{height (h)}$



$$B = l \times w$$

EXAMPLE:

Find: $V_{\text{rectangular prism}}$

Given: $l = 5 \text{ cm}$, $w = 3 \text{ cm}$, $h = 1 \text{ cm}$

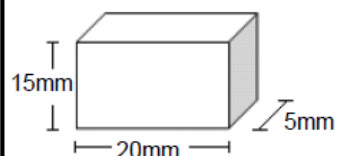
Solution: $V_{\text{rectangular prism}} = l \times w \times h$
 $= 5 \text{ cm} \times 3 \text{ cm} \times 1 \text{ cm}$
 $= 15 \text{ cm}^3$

TIP: Make sure that all units of the given are uniform before plugging in to the formula.

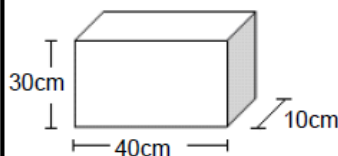
Solve for the volume. Make sure that all units are the same before computing .

l	w	h	volume
4 cm	3 cm	1 cm	13)
12 cm	9 cm	3 cm	14)
8 m	6 m	2 m	15)
40 mm	30 mm	10 mm	16)
5 in.	3 in.	2 in.	17)
6 in.	3 in.	3 in.	18)
9 m	6 m	5 m	19)
36 ft.	28 ft.	5 ft.	20)
80 cm	15 cm	1 cm	21)
6 mm	48 mm	12 mm	22)

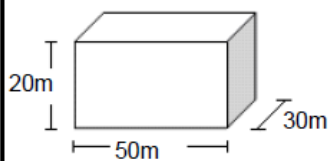
Identify the values being asked.



- | | |
|--------|----|
| length | 1) |
| width | 2) |
| height | 3) |
| volume | 4) |



- | | |
|--------|----|
| length | 5) |
| width | 6) |
| height | 7) |
| volume | 8) |



- | | |
|--------|-----|
| length | 9) |
| width | 10) |
| height | 11) |
| volume | 12) |

Draw a rectangular prism and label with the corresponding measurements. Compute for the volume.

Given:

length = 3 m

width = 10 m

height = 10 m

23)

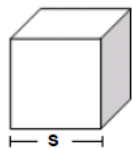
24) Volume

_____ m^3



ARAL Math Grade 6 Worksheet 32 (Part 2)

FORMULA: $V_{\text{cube}} = \text{side (s)} \times \text{side (s)} \times \text{side (s)}$
 $= s^3$

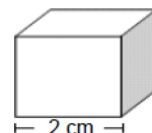


EXAMPLE:

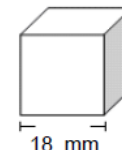
Find: V_{cube}

Given: $s = 2 \text{ cm}$

Solution: $V_{\text{cube}} = s^3$
 $= (2 \text{ cm})^3$
 $= (2 \text{ cm} \times 2 \text{ cm} \times 2 \text{ cm})$
 $= 8 \text{ cm}^3$

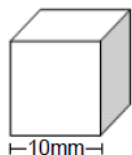


31) $V =$

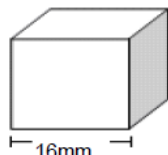


32) $V =$

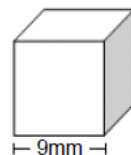
Solve for the volume of the cube.



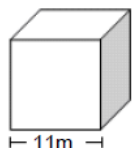
25) $V =$



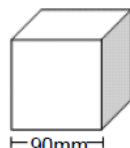
26) $V =$



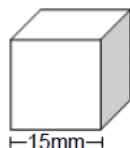
27) $V =$



28) $V =$



29) $V =$



30) $V =$

Solve for the volume of the cube given the length of each side.

side	volume
$s = 5 \text{ cm}$	33)
$s = 100 \text{ mm}$	34)
$s = 35 \text{ mm}$	35)
$s = 3 \text{ m}$	36)
$s = 6 \text{ ft}$	37)
$s = 4 \text{ cm}$	38)

Draw a cube and label with the corresponding measurement. Compute for the volume.

Given: $s = 7 \text{ cm}$

39)

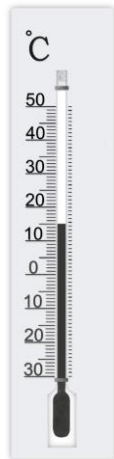
40) Volume

_____ cm^3

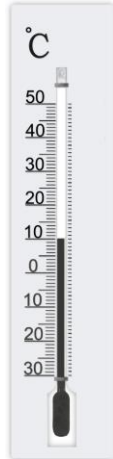


ARAL Math Grade 6 Worksheet 33 (Part 1)

Identify the temperature in the thermometer. Write your answer in degrees Celsius on the space provided.



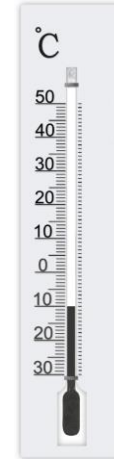
1. _____



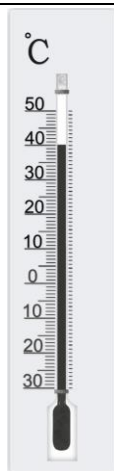
2. _____



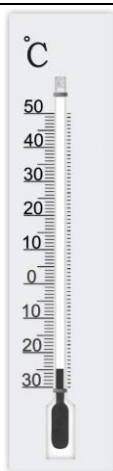
3. _____



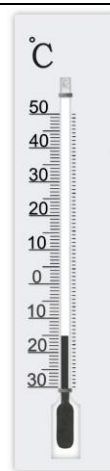
4. _____



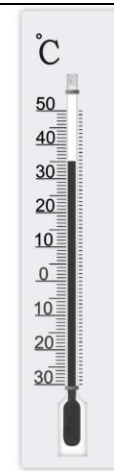
5. _____



6. _____



7. _____



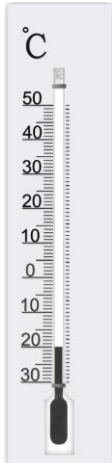
8. _____



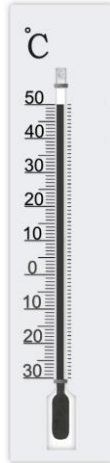


ARAL Math Grade 6 Worksheet 33 (Part 2)

Identify the temperature in the thermometer. Write your answer in degrees Celsius on the space provided.



9. _____



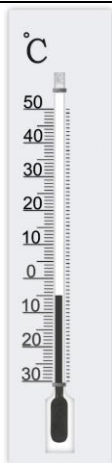
10. _____



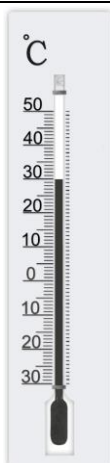
11. _____



12. _____



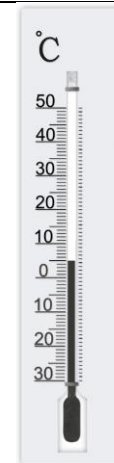
13. _____



14. _____



15. _____

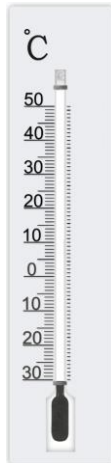


16. _____

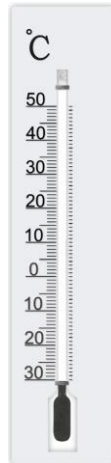


ARAL Math Grade 6 Worksheet 34 (Part 1)

Color the thermometer to indicate the temperature below.



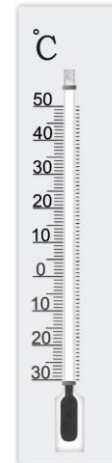
1. 0 °C



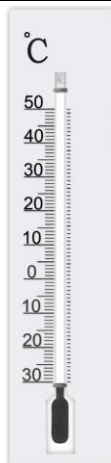
2. -10 °C



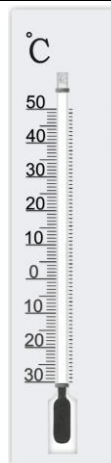
3. 10 °C



4. 35 °C



5. 20 °C



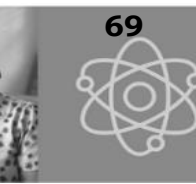
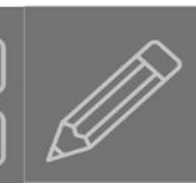
6. 15 °C



7. 5 °C



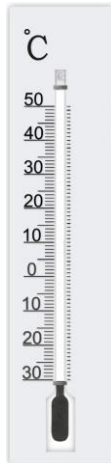
8. -25 °C



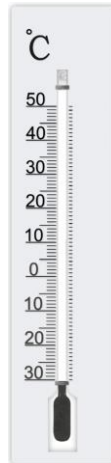


ARAL Math Grade 6 Worksheet 34 (Part 2)

Color the thermometer to indicate the temperature below.



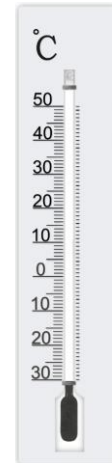
9. 20 °C



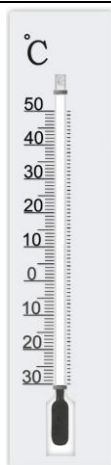
10. 45 °C



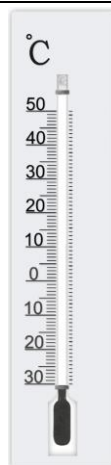
11. -30 °C



12. -10 °C



13. -25 °C



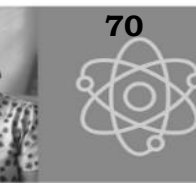
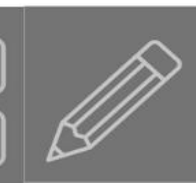
14. 50 °C



15. 25 °C



16. 5 °C





ARAL Math Grade 6 Worksheet 35 (Part 1)

Write the temperature indicated on the thermometer on the spaces provided.	
	1.
	2.
	3.
	4.
	5.



ARAL Math Grade 6 Worksheet 35 (Part 2)

Write the indicated temperature on the thermometer.	
	6. 38 °C
	7. 72.3 °C
	8. -20.1 °C
	9. -15.7 °C
	10. 57.5 °C





iSipnayan

