

Math 7

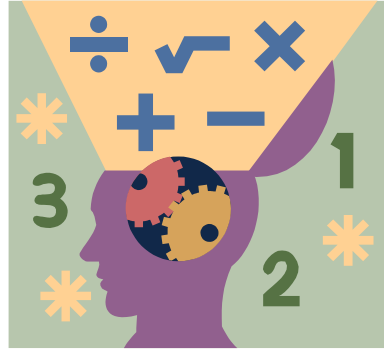


Colonial School District

Summer Math Packet

The concepts included in this packet will help reinforce key skills your child has encountered in math this year. Please encourage them to complete as many activities as possible as it will lead to greater success next year. The answer key to this packet is available on the district website (www.colonialsd.org).

June 2019



Dear Parents/Guardians,

First, we would like to thank you for all of the additional support you offer at home. Education is a true partnership between school and family that is essential to a child's success.

As this school year comes to a close, we wanted to again encourage you to continue to reinforce and foster the mathematical skills and practices that have been developed this year by scheduling time for your child to work through this summer math packet. The activities were selected by our grade level experts with the key mathematical concepts of the school year in mind. The ultimate goal is to reinforce and strengthen the skills that will serve as building blocks for future learning.

Wishing you a relaxing, yet exciting, math-filled summer!

Sincerely,

The Curriculum Department

Integers

Adding

RULE	EXAMPLES
SAME SIGNS 1. Add. 2. Sum is positive if both are positive; negative if both are negative.	$5 + 8 = 13$ $-5 + -8 = -13$
DIFFERENT SIGNS 1. Subtract the absolute values. 2. Answer is sign of the integer with the greater absolute value.	$5 + -8 = -3$ $-5 + 8 = 3$

Find each sum.

1. $-4 + -8$

2. $14 + 16$

3. $-43 + -12$

4. $-16 + 11$

5. $28 + -42$

6. $75 + -5$

7. $-49 + -32$

8. $23 + -23$

9. $86 + -18$

Integers

Subtracting

RULE	EXAMPLES	
1. Change the minus sign to a plus. 2. Find the opposite of the 2 nd number. 3. Add; using your rules for adding integers.	$\begin{array}{l} 5 - 8 \\ = 5 + -8 \\ = -3 \end{array}$	$\begin{array}{l} -9 - -12 \\ = -9 + 12 \\ = 3 \end{array}$

Find each difference.

1. $4 - 7$

2. $-5 - 3$

3. $-8 - 2$

4. $-3 - 24$

5. $10 - 17$

6. $13 - 9$

7. $-41 - 37$

8. $62 - -29$

9. $-6 - -6$

Integers

Multiplying & Dividing

RULE	EXAMPLES	
1. Multiply or divide. 2. The answer is positive if the signs are the same (both positive or both negative); negative if the signs are different (one positive and one negative).	-5×-8 $= 40$	16×-3 $= -48$
	$40 \div 4$ $= 10$	$-20 \div 10$ $= -2$

Find each product or quotient.

1. -3×-8

2. -5×-5

3. -15×3

4. 0×-121

5. $-35 \div -7$

6. $-65 \div 5$

7. $240 \div -4$

8. $36 \div 12$

9. $(-49 \div 7) \times 8$

Integers

Problem Solving

RULE

4-Step Plan for Problem Solving

1. Explore. You need to read the problem and know what information you have and need and what is asked.
2. Plan. Develop a plan to solve the problem. Chose a strategy.
Often it is helpful to make an estimate.
3. Solve. Carry out your plan
4. Examine. Be sure to label your answer appropriately. Check your answer by comparing to your estimate.
If the answer does not make sense, make a new plan and try again.

NOTE:

Remember in most cases there is more than one way to solve the problem!

1. Rita opened a checking account with a balance of \$150. She wrote 2 checks: \$87 and \$68. How much money remained in the account?
2. During a space shuttle launch, a maneuver is scheduled to begin at T minus 85 seconds (i.e. 85 seconds before liftoff). If the maneuver lasts 2 minutes, at what time will the maneuver be complete?
3. The water level in a tank decreased 10 centimeters in 5 minutes. If the tank drains at a steady rate, what is the change in the water level each minute?

Order of Operations

$$5(2) + 7 \cdot 3$$

$$\frac{5^2 - 2^4}{3}$$

$$\frac{(6+8)(7-3)}{-2+3 \cdot 4}$$

$$19 - 5(-2)$$

$$-4(5-6) + 3$$

$$5^2 - 3\left(\frac{2}{3} + 1\right)$$

Ratio, Rates, Proportions

A ratio is the comparison of two numbers by division. (5 to 2, 5:2, or $\frac{5}{2}$)

A rate is a ratio that compares two measurements with different units. (50 miles per hour)

A proportion is an equation that shows two ratios are equivalent. ($\frac{2}{5} = \frac{6}{15}$)

Using cross products to solve.

$$\frac{2}{5} = \frac{6}{n}$$

$$2n = 5 \times 6$$

$$2n = 30$$

$$n = 15$$

#1-4 Express each ratio as a fraction in simplest form.

1. 9 to 12

2. 5:20

3. \$2.50 for 5 notepads

4. \$7 to rent 2 videos

#5-7 Express each ratio as a unit rate.

5. $\frac{120 \text{ miles}}{2 \text{ hours}}$

6. $\frac{300 \text{ feet}}{5 \text{ sec}}$

7. $\frac{800 \text{ pounds}}{40 \text{ sq. inches}}$

#8-10 Use cross products to solve each proportion.

8. $\frac{5}{8} = \frac{x}{40}$

9. $\frac{6}{3} = \frac{10}{1}$

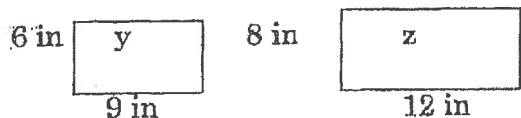
10. $\frac{n}{5} = \frac{42}{7}$

Ratio & proportion: Problem Solving

Name: _____

Solve each problem.

1. Use the rectangles below to complete the following:
 - a. Write ratios comparing the widths, the lengths, and the perimeters of rectangle y to z.
 - b. Show whether or not these ratios are equivalent.



2. Caroline found that 6 students out of 18 students she surveyed liked sushi. Josh found that 9 students out of 24 students he surveyed liked sushi. Which result shows a greater preference for sushi?
3. The band has 5 days to sell 195 tickets to ensure a sellout at their fall concert. At what rate must they sell the tickets?
4. If a race car uses 323 liters of gasoline in a 500 kilometer race, about how many liters were used for each kilometer?
5. A supermarket has soda on sale, 6 cans for \$1.95. Each can sold separately costs \$0.35. How much do you save buying the 6 cans on sale?
6. Creek Middle School has 1,000 students, 40 teachers, and 5 administrators. If the school grows to 1,200 students and the ratios are maintained, find the number of teachers and administrators that will be needed.

1.

2.

3.

4.

5.

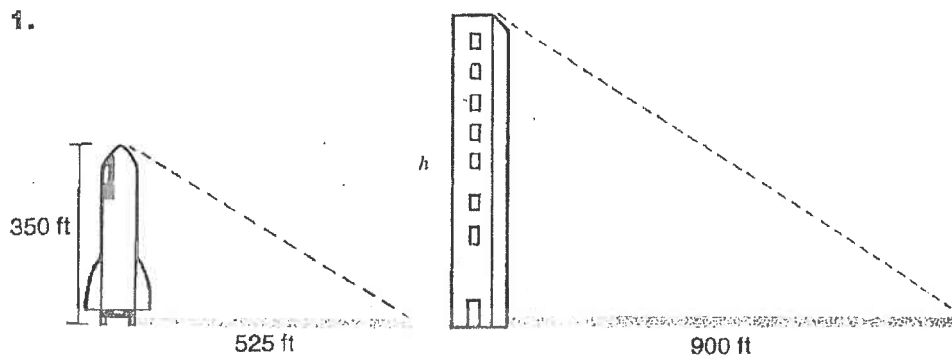
6.

Name _____

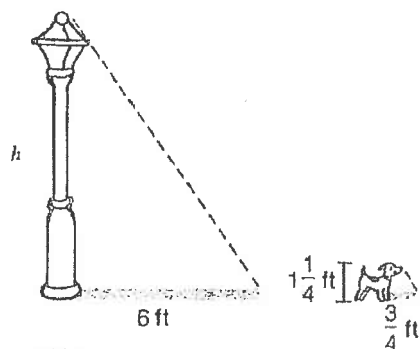
Finding Height

Write and solve a proportion to find each height.

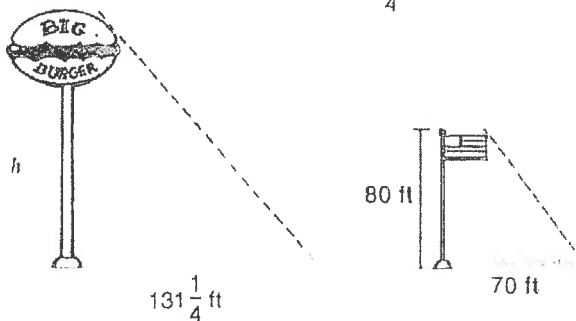
1.



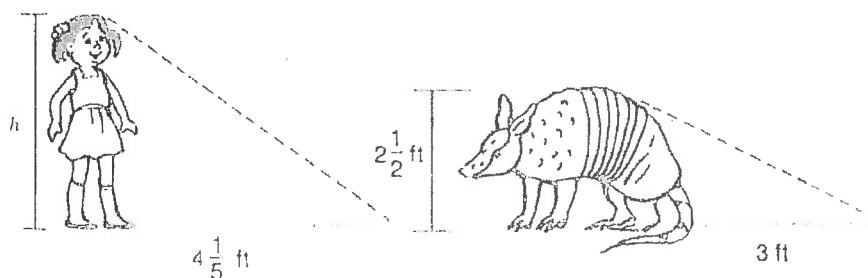
2.



3.

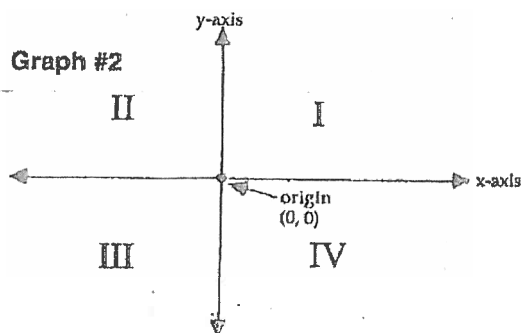


4.

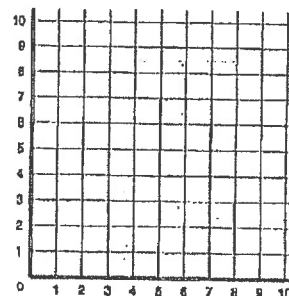


Coordinate Plane

You have been graphing on a portion of the coordinate plane for many years. The coordinate plane you have used for graphing is shown to the right below (Graph #1). This is an appropriate graph to use when you are strictly dealing with positive numbers. In many problem solving situations, this is all that is needed. Since you have been introduced to negative numbers, you can now use the entire coordinate plane. The expanded coordinate plane is shown below (Graph #2). With this coordinate plane, you can graph all the real numbers. Even though only integers are shown on each axis, fractions and decimals can be approximated.

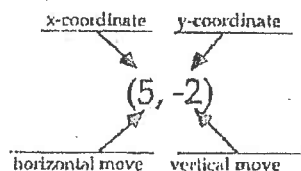


Graph #1

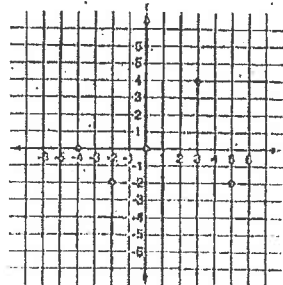


Each section of the coordinate plane is labeled with a Roman numeral. These sections are called quadrants. You are most familiar working with quadrant I which includes all positive numbers.

The first thing you learned to do with graphing is to plot points. Points are described by ordered pairs such as $(0, 0)$, $(3, 4)$, $(5, -2)$, $(-4, 0)$, or $(-2, -2)$. These points are shown on Graph #3.



Graph #3



The first number in the ordered pair is called the x-coordinate; the second number is called the y-coordinate. The pair of numbers is a set of directions to a specific point. The directions always start from the origin, the point where the two axes intersect. The sign on a number tells in which direction to move. When a number is positive, move in a positive direction—to the right on the x-axis or up on the y-axis. When a number is negative, move in a negative direction—to the left on the x-axis or down on the y-axis. So, to get to the point described by the ordered pair $(5, -2)$, start at the origin (0) . Move 5 units to the right and 2 units down. You should land in quadrant IV.

Graphing on the Coordinate Plane

Directions for #1-#8:

- Identify the quadrant or axis where the point is located.
- Graph each ordered pair on the coordinate grid.
- Write the letter next to the point.

1. A $(-4, -1)$

2. B $(4, 1)$

3. C $(3, 0)$

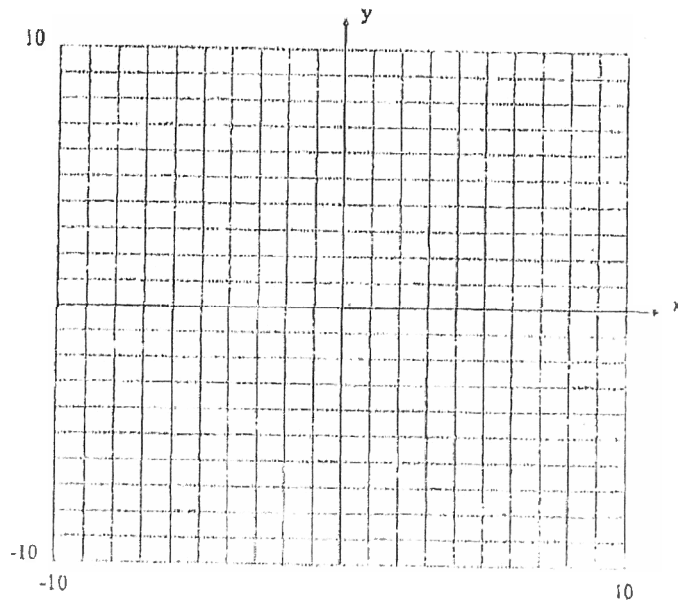
4. D $(0, 4)$

5. E $(2, 2)$

6. F $(-2, 5)$

7. G $(-2, -5)$

8. H $(-1, 4)$



Geometry: Coordinate Planes

Name _____

Part I: Naming Points on a Graph. Name the coordinates of the points. Use the coordinate system below. Remember: the first coordinate is the distance from 0 on the x-axis and the second coordinate is the distance from 0 on the y-axis.

1. A

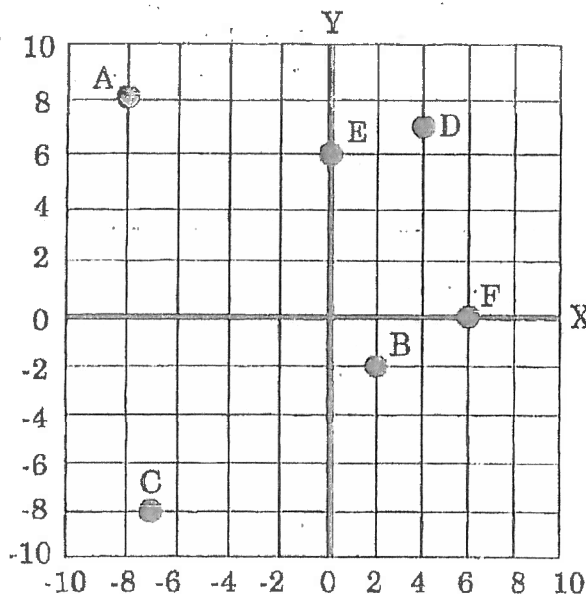
2. B

3. C

4. D

5. E

6. F



Part II: Graphing Points. On graph paper, draw a coordinate plane. Then graph each set of points. Label each point.

7. G (-4, 4)

11. K (-6, -3)

8. H (2, 4)

12. L (-5, 0)

9. I (2, -2)

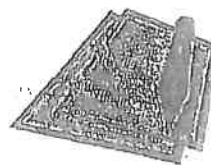
13. M (0, 4)

10. J (0, 0)

14. N (-2, 7)



THINK ABOUT IT!



15. List five ordered pairs which lie on the same horizontal line. What generalization can you make about the y-coordinates of points that lie on the same horizontal line? Repeat this exercise for a vertical line.

Equations

One-step Equations

RULE	EXAMPLE
<p>1. Look at what has been done to the variable,</p> <p>2. Undo it using the inverse operation on both sides of the equation.</p> <p>3. Check your answer by replacing the variable with the solution.</p>	$\begin{array}{r} X - 15 = 29 \\ + 15 \quad + 15 \\ \hline x = 44 \end{array}$ $\checkmark 44 - 15 = 29$

Solve.

1. $d + 32 = 70$

2. $708 = c + 30$

3. $x - 89 = 176$

4. $x - 36 = 12$

5. $5x = 225$

6. $12n = 96$

7. $n \div 72 = 360$

8. $n \div 12 = 12$

Fractions: Solving Equations

Name _____

Solve and check each equation.

$$n - \frac{6}{8} = \frac{2}{3}$$
$$n - \frac{6}{8} + \frac{6}{8} = \frac{2}{3} + \frac{6}{8}$$

$$n = 1\frac{5}{12}$$

$$1\frac{5}{12} - \frac{6}{8} = \frac{2}{3}$$
$$\frac{17}{12} - \frac{6}{8} = \frac{2}{3}$$
$$\frac{34}{24} - \frac{18}{24} = \frac{16}{24} = \frac{2}{3} \checkmark$$

1. Look at what has been done to the variable.

2. Undo it by using the inverse (opposite) operation on both sides of the equation.

3. Check your answer by plugging it back into the equation to see if it makes the equation true.

1. $x - \frac{2}{3} = \frac{4}{9}$

2. $x + \frac{3}{4} = \frac{8}{9}$

3. $m - \frac{3}{10} = \frac{5}{8}$

4. $\frac{4}{5}y = 5$

5. $6x = \frac{4}{3}$

6. $c + \frac{3}{4} = \frac{4}{5}$

7. $y - \frac{10}{30} = \frac{2}{5}$

8. $x + \frac{1}{2} = \frac{7}{10}$

9. $1\frac{2}{3}x = \frac{6}{5}$

10. $1\frac{2}{9} = 18h$

11. $\frac{x}{12} = 2\frac{3}{10}$

12. $\frac{3}{7} = x + \frac{2}{5}$

13. $\frac{1}{5} + y = \frac{1}{4}$

14. $\frac{5}{6}x = \frac{7}{12}$

15. $6n = \frac{3}{5}$

Equations

Two-step Equations

RULE	EXAMPLE
1. First, undo addition or subtraction.	$3x - 2 = 13$
2. Then, undo multiplication or division.	$\begin{array}{r} +2 \quad +2 \\ 3x \quad = 15 \\ 3 \quad \quad 3 \end{array}$
3. Check your answer by replacing the variable with the solution.	$x = 5$ $\checkmark 3 \times 5 - 2$ $15 - 2 = 13$

Solve.

1. $6d - 3 = 32$

2. $\frac{x}{5} + 2 = 6$

3. $2y + 7 = 15$

4. $\frac{b}{7} - 13 = 23$

5. $-5y + 9 = 24$

6. $\frac{f}{8} - 3 = -27$

Translating Word Problems to Equations

Directions for #1-#6:

Write an equation for each sentence. Solve. Show your work.

1. A number b plus 5 equals 15.

$$\begin{array}{r} B + 5 = 15 \\ - 5 \quad - 5 \\ \hline B = 10 \end{array}$$

2. A number r minus 2 is 8.

3. A number w added to 7 is 32.

4. If 4 is added to the product of 6 and a number t , the result is 76.

5. Rebecca completes four addition problems each minute. How many minutes will it take her to complete 12 problems?

6. Melissa spent three hours each day painting her house. She spent a total of 27 hours painting. How many days did she paint?

Name _____ Date _____

Page _____

**Unit 5 Two-Step Equations
(Distributive Property)**

Worksheet

Lesson 5

Lesson Objective

To use distributive property to solve equations.

1) $3(c + 5) = 12$

2) $3(t + 4) = 18$

3) $5(4d + 8) = 40$

4) $3(2x + 7) = 27$

5) $3(2 + f) = -15$

6) $2(1 + m) = 16$

7) $-(2k - 11) = 7$

8) $-4(3x - 2) = -32$

9) $\frac{3}{4}(4x + 8) = -12$

10) $\frac{1}{3}(9c - 3f) = -9$



Solving Multi-Step Equations

Variables on Both Sides - Negative Coefficients

Name: _____ Date: _____



Solve the equations.

(1) $-11x - 105 = -x + 35$

(2) $9x - 19 = 8x + 5$

(3) $7x - 29 = 5x + 23$

(4) $7x - 143 = -4x + 121$

(5) $-16 - x = 16 - 3x$

(6) $-58 + 8x = 122 - 4x$

(7) $-121 + 3x = 140 + 12x$

(8) $7x - 91 = 101 - 9x$

(9) $-17 + 10x = 31 + 12x$

(10) $-20 + x = 3x + 10$

Name: _____

Per #

Math 7H

Independent Events Worksheet

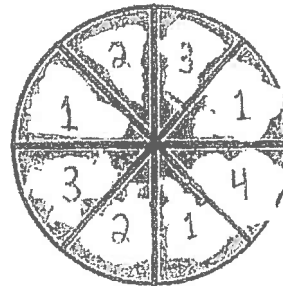
1. The spinner at the right is spun once and a card is drawn from a deck of 4 cards labeled A, B, C, and D. Find the following probabilities:

a) $P(3 \text{ and } A)$ _____ e) $P(5 \text{ and } C)$ _____

b) $P(4 \text{ and } B \text{ or } C)$ _____

c) $P(\text{not } 4 \text{ and } C)$ _____

d) $P(1 \text{ and not } D)$ _____



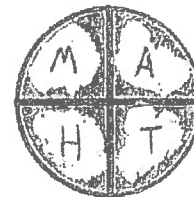
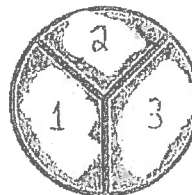
2. Each of the spinners at the right is spun once. Find the probability:

a) $P(M \text{ and an odd \#})$ _____

b) $P(\text{a vowel and a } \# < 3)$ _____

c) $P(\text{not } H \text{ and a prime \#})$ _____

d) $P(\text{a letter and a \#})$ _____



3. One deck of cards is numbered 1-12 and a second deck of cards is numbered 1-9. A card is drawn from the 12 card deck, then from the 9 card deck. Find the probability:

a) $P(4 \text{ and } 4)$ _____

d) $P(\text{not } 5 \text{ or } 8 \text{ and an even \#})$ _____

b) $P(\text{an even \# and an odd \#})$ _____

e) $P(\text{not } 11 \text{ and a factor of } 9)$ _____

c) $P(\text{a factor of } 10 \text{ and a multiple of } 3)$ _____

f) $P(\text{a composite \# and a prime \#})$ _____

Student Name: _____

Score: _____

Stem and Leaf Plot - Easy

Draw stem and leaf plot for the given data:

12, 23, 35, 23, 14, 25, 32, 18

Stem	Leaf

45, 46, 57, 58, 67, 46, 57, 68, 47

Stem	Leaf

23, 45, 37, 21, 35, 30, 42, 26, 33

Stem	Leaf

10, 35, 11, 30, 46, 41, 36, 37, 15

Stem	Leaf

56, 34, 54, 48, 42, 31, 55, 48, 45, 38

Stem	Leaf

87, 68, 75, 69, 90, 79, 64, 66, 85, 92

Stem	Leaf

Student Name: _____

Score: _____

Box – Whisker Plot - Easy

Problem 1:

Draw box and whisker for the given data:

8, 6, 3, 5, 3, 4, 2, 9

Work Space:

First Quartile =

Second Quartile or Median =

Third Quartile =

Range =



Problem 2:

Draw box and whisker for the given data:

4, 8, 8, 6, 2, 2, 8, 6, 6, 9

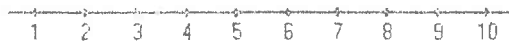
Work Space:

First Quartile =

Second Quartile or Median =

Third Quartile =

Range =



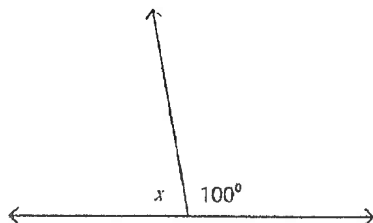
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Supplementary Angles

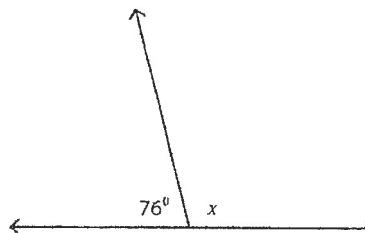
Find the value of x in each linear pair.

1)



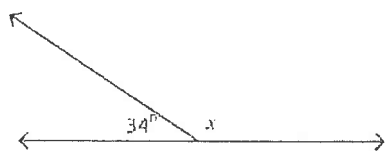
$$x = \underline{\hspace{2cm}}$$

2)



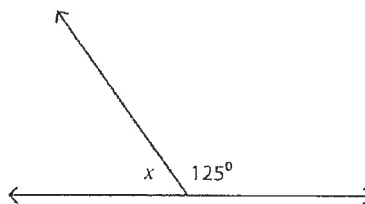
$$x = \underline{\hspace{2cm}}$$

3)



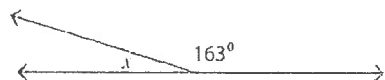
$$x = \underline{\hspace{2cm}}$$

4)



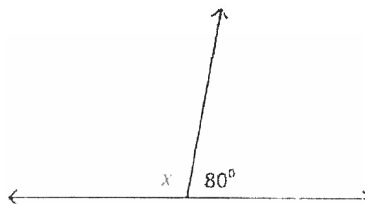
$$x = \underline{\hspace{2cm}}$$

5)



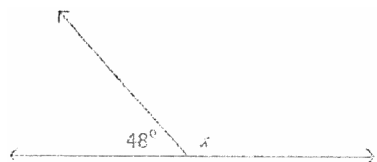
$$x = \underline{\hspace{2cm}}$$

6)



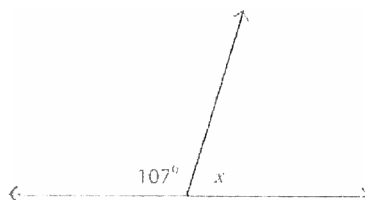
$$x = \underline{\hspace{2cm}}$$

7)



$$x = \underline{\hspace{2cm}}$$

8)



$$x = \underline{\hspace{2cm}}$$

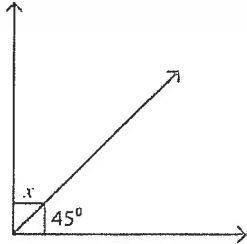
Name : _____

Score : _____

Complementary Angles

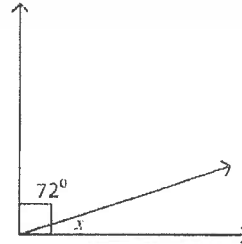
Find the value of x in each right angle.

1)



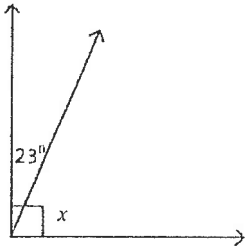
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2)



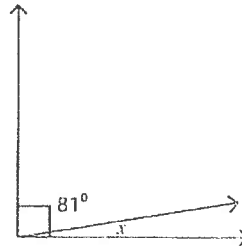
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3)



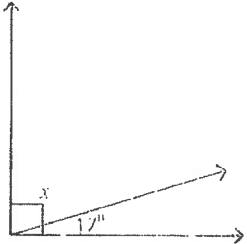
$$x = \underline{\hspace{2cm}}$$

4)



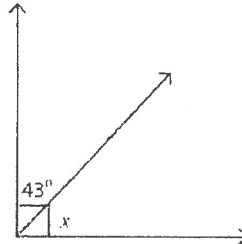
$$x = \underline{\hspace{2cm}}$$

5)



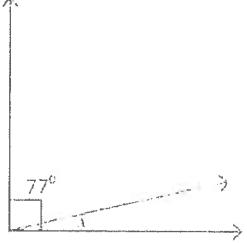
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6)



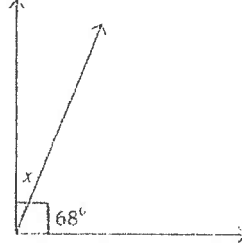
$$x = \underline{\hspace{2cm}}$$

7)



$$x = \underline{\hspace{2cm}}$$

8)



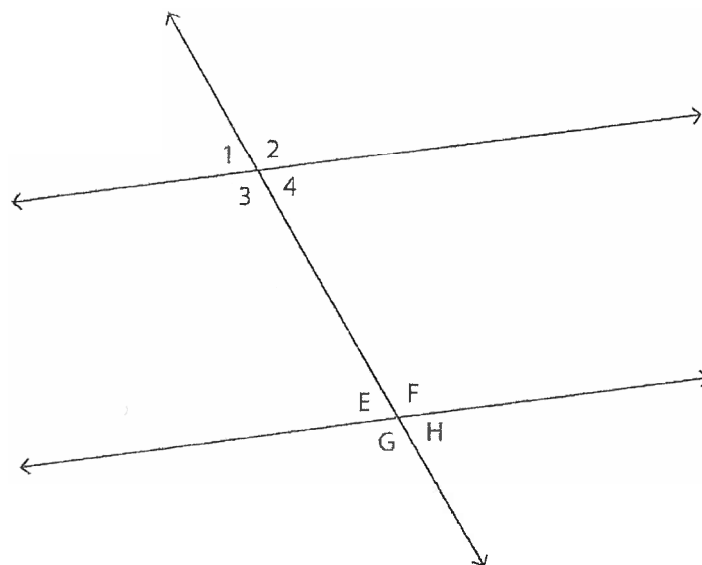
$$x = \underline{\hspace{2cm}}$$

Name : _____

Score : _____

Angle Relationship

Write the angle relationship for each pair of angles.



- 1) $\angle 1$ and $\angle H$ are _____
- 2) $\angle 4$ and $\angle F$ are _____
- 3) $\angle G$ and $\angle 2$ are _____
- 4) $\angle 3$ and $\angle F$ are _____
- 5) $\angle 2$ and $\angle H$ are _____
- 6) $\angle 1$ and $\angle G$ are _____
- 7) $\angle 3$ and $\angle E$ are _____
- 8) $\angle 4$ and $\angle E$ are _____

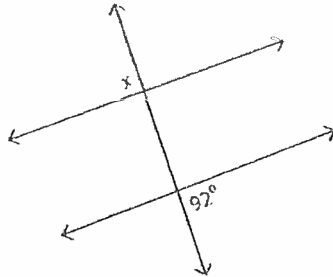
Name : _____

Score : _____

Exterior Angles

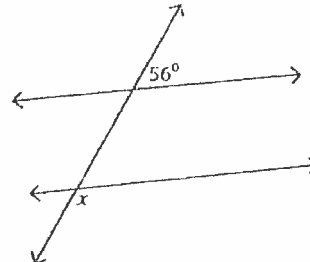
Find the value of x .

1)



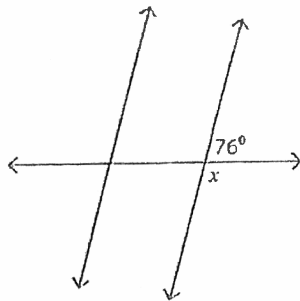
$x =$ _____

2)



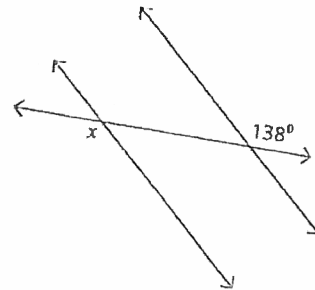
$x =$ _____

3)



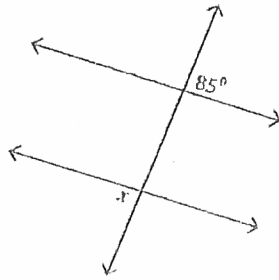
$x =$ _____

4)



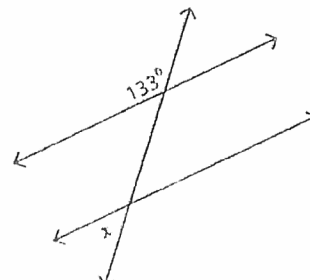
$x =$ _____

5)



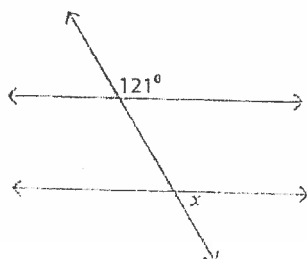
$x =$ _____

6)



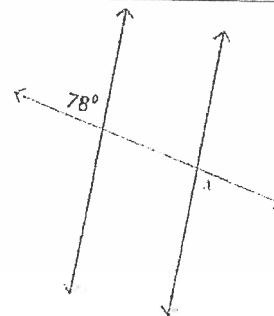
$x =$ _____

7)



$x =$ _____

8)



$x =$ _____

Finding Slope from Tables

Homework

Name _____
Date _____ Period _____

Determine the slope of the line represented by the table of values. Describe the graphs of the line as increasing, decreasing, horizontal, or vertical. Copy one of these tables on the back of this page and write a situation that describes the data.

1.

x	y
2	3
1	5
0	7
1	9
2	11

m =

Graph Description

2.

x	y
3	5
2	2
1	1
0	4
1	7

m =

Graph Description

3.

x	y
1	17
2	13
3	9
4	5
5	1

m =

Graph Description

4.

x	y
6	4
5	9
4	14
3	19
2	24

m =

Graph Description

5.

x	y
0	3
1	5.5
2	8
3	10.5
4	13

m =

Graph Description

6.

x	y
2	5
1	4.75
0	4.5
1	4.25
2	4

m =

Graph Description

7.

x	y
2	$\frac{2}{5}$
1	$\frac{4}{5}$
0	$\frac{6}{5}$
1	$\frac{8}{5}$

m =

Graph Description

8.

x	y
1	1
1	2
3	3
5	4
7	5

m =

Graph Description

9.

x	y
5	10
2	5
1	0
4	5
7	10

m =

Graph Description

10.

x	y
5	10
3	6
1	2
1	2
3	6

m =

Graph Description

11.

x	y
4	6
2	6
0	6
2	6
4	6

m =

Graph Description

12.

x	y
5	2
5	4
5	6
5	8
5	10

m =

Graph Description

Name : _____

Score : _____

Teacher : _____

Date : _____

Find the Slope and Y-intercept for Each Equation

1) $y = -\frac{1}{3}x + 1$

slope = _____

y-intercept = _____

2) $y = \frac{3}{2}x + 3$

slope = _____

y-intercept = _____

3) $y = \frac{1}{3}x + 3$

slope = _____

y-intercept = _____

4) $y = -x + 3$

slope = _____

y-intercept = _____

5) $y = -2x + 2$

slope = _____

y-intercept = _____

6) $y = 4x - 10$

slope = _____

y-intercept = _____

7) $y = -\frac{8}{3}x + 4$

slope = _____

y-intercept = _____

8) $y = \frac{1}{2}x + 4$

slope = _____

y-intercept = _____

9) $y = -6x - 3$

slope = _____

y-intercept = _____

10) $y = \frac{3}{2}x + 3$

slope = _____

y-intercept = _____

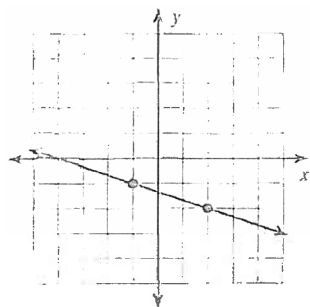


Slope

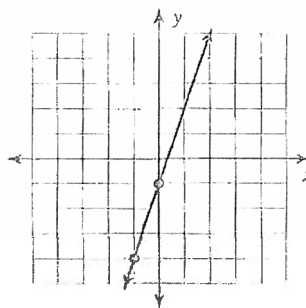
Date _____ Period _____

Find the slope of each line.

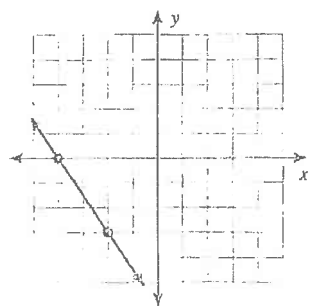
1)



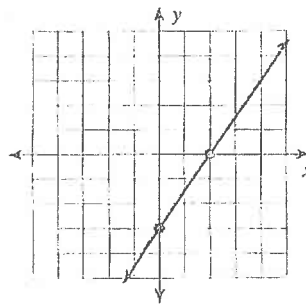
2)



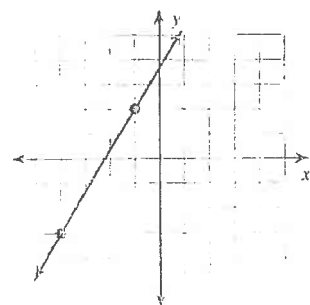
3)



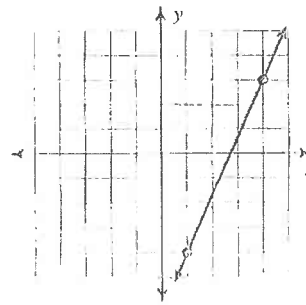
4)



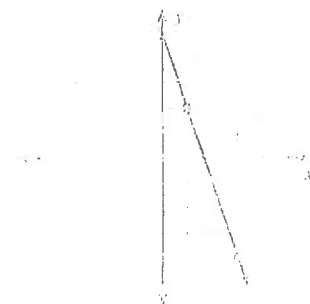
5)



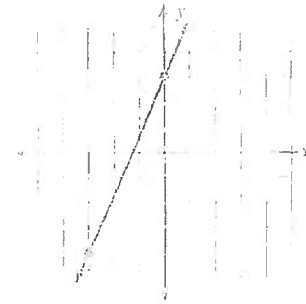
6)



7)

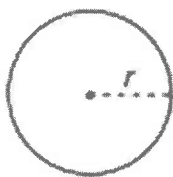


8)



Formula Sheet

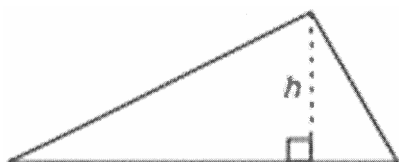
Circle



$$C = 2\pi r$$

$$A = \pi r^2$$

Triangle



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

Square



$$A = s^2$$

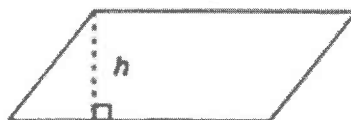
Rectangle



$$A = lw$$

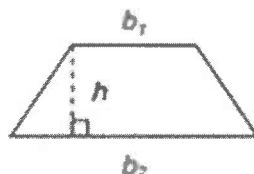
$$P = 2l + 2w$$

Parallelogram



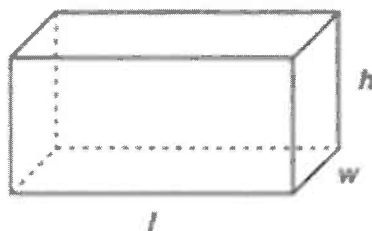
$$A = bh$$

Trapezoid



$$A = \frac{1}{2}h(b_1 + b_2)$$

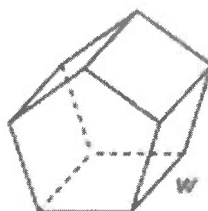
Rectangular Prism



$$V = lwh$$

$$SA = 2lw + 2lh + 2wh$$

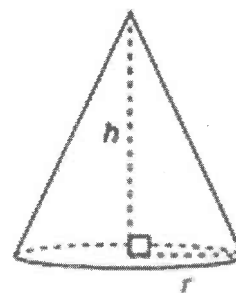
Polygonal Prism



$$V = Bw, \text{ where } B = \text{area of the base}$$

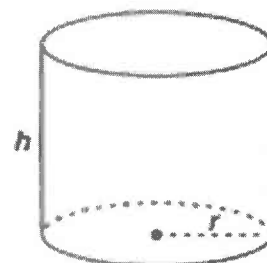
$$SA = Pw + 2B, \text{ where } P = \text{perimeter of base}$$

Cone



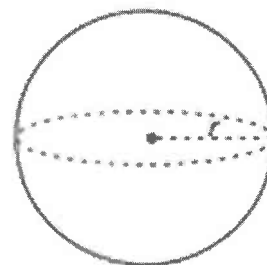
$$V = \frac{1}{3}\pi r^2 h$$

Cylinder



$$V = \pi r^2 h$$

Sphere



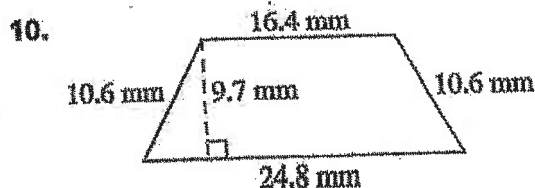
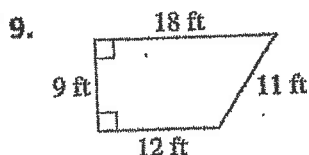
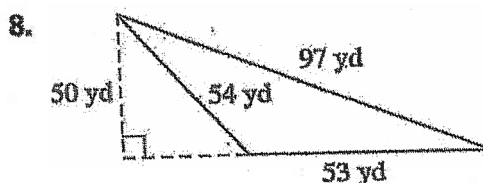
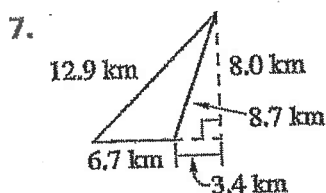
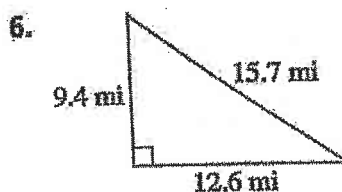
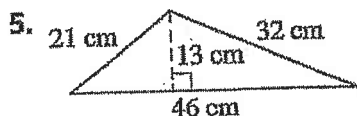
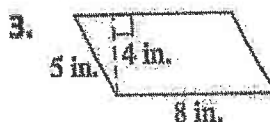
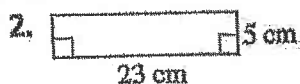
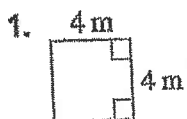
$$V = \frac{4}{3}\pi r^3$$

Skill: Area Review

Investigation 1

Filling and Wrapping

Find the area of each figure.



Name : _____

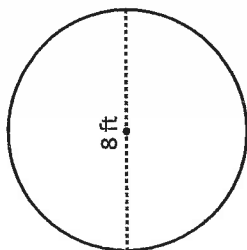
Score : _____

Easy: S1

Area & Circumference

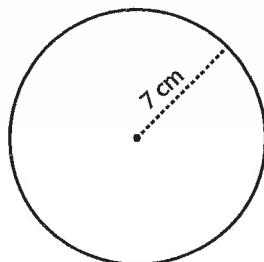
Find the area and circumference of each circle.

1)



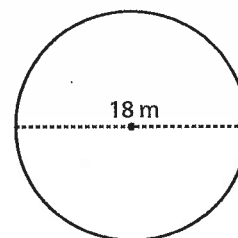
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

2)



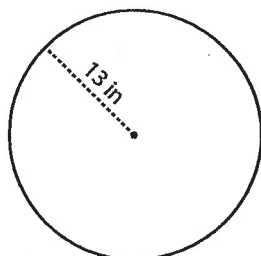
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

3)



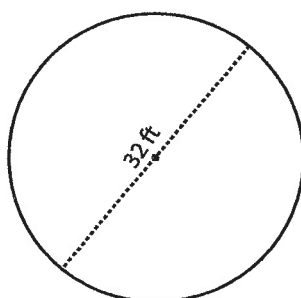
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

4)



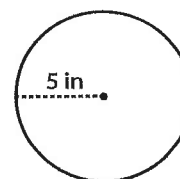
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

5)



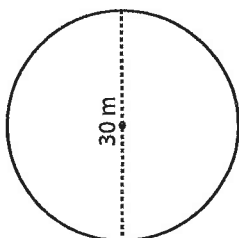
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

6)



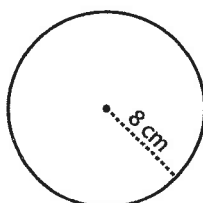
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

7)



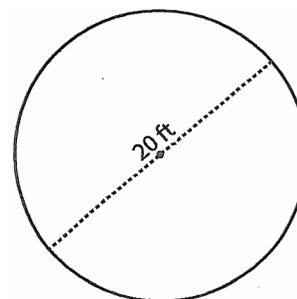
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

8)



Radius = _____
Diameter = _____
Area = _____
Circumference = _____

9)



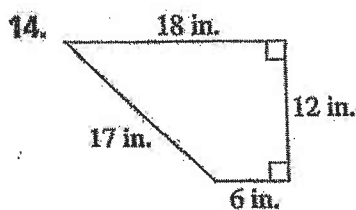
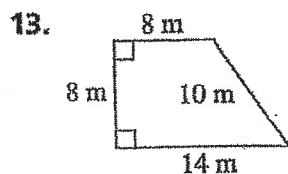
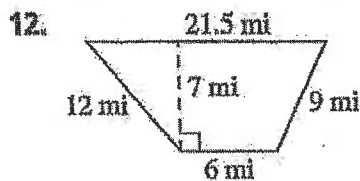
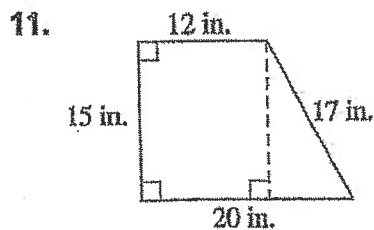
Radius = _____
Diameter = _____
Area = _____
Circumference = _____

Skill: Area Review (continued)

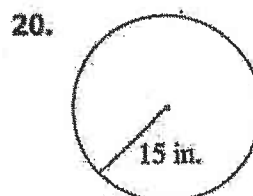
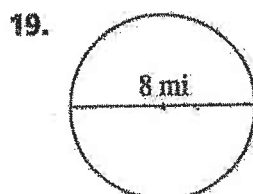
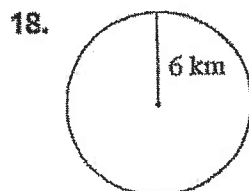
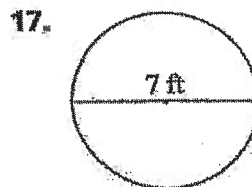
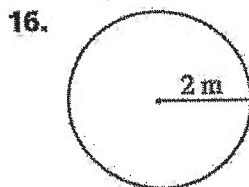
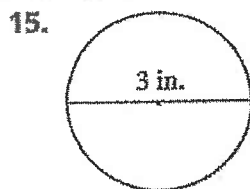
Investigation 1

Filling and Wrapping

Find the area of each figure.



Circumference
Find the ~~perimeter~~ and area of each figure.



Name: _____

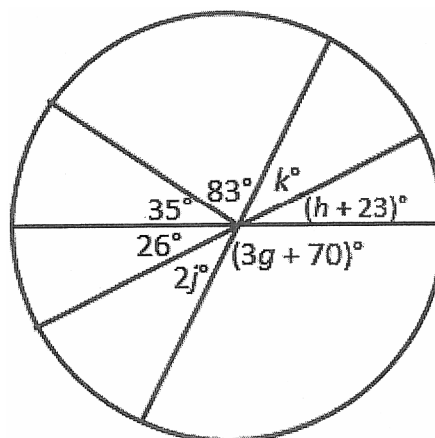
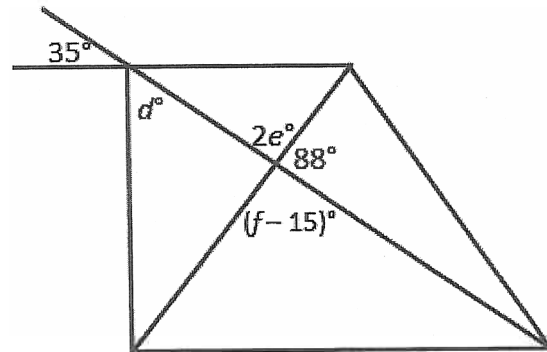
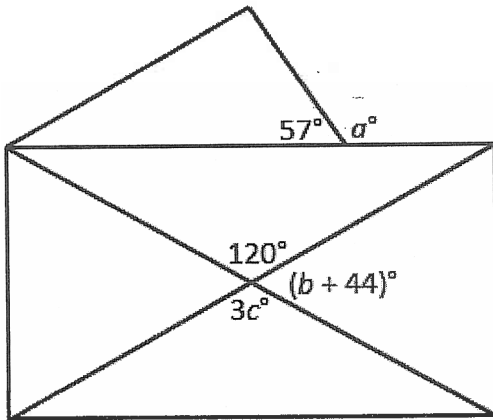
Using Angle Relationships

Find the values of the variables.

$$a = \underline{\hspace{2cm}} \quad b = \underline{\hspace{2cm}} \quad c = \underline{\hspace{2cm}}$$

$$d = \underline{\hspace{2cm}} \quad e = \underline{\hspace{2cm}} \quad f = \underline{\hspace{2cm}}$$

$$g = \underline{\hspace{2cm}} \quad h = \underline{\hspace{2cm}} \quad j = \underline{\hspace{2cm}} \quad k = \underline{\hspace{2cm}}$$



Name : _____

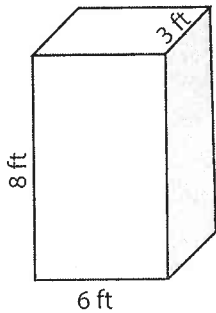
Score : _____

ES1

Volume - Rectangular Prism

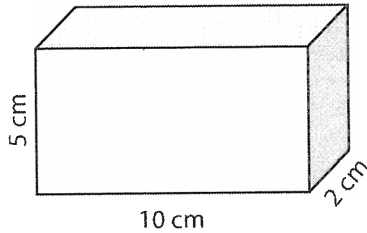
Find the volume of each rectangular prism.

1)



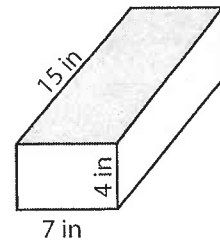
Volume = _____

2)



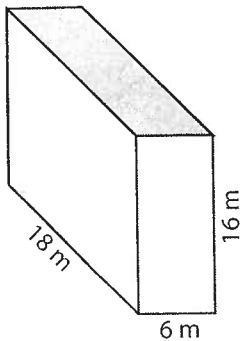
Volume = _____

3)



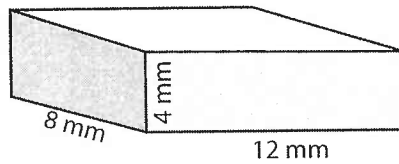
Volume = _____

4)



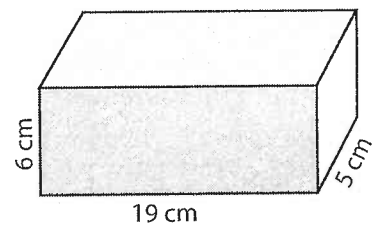
Volume = _____

5)



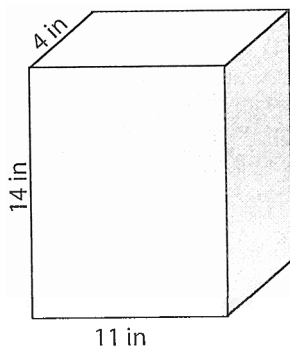
Volume = _____

6)



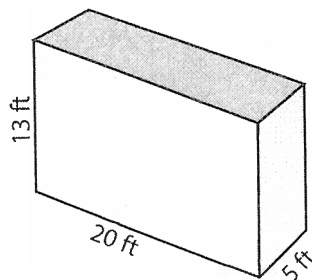
Volume = _____

7)



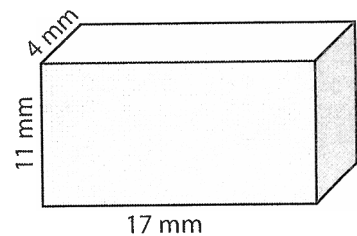
Volume = _____

8)



Volume = _____

9)



Volume = _____

- 10) A bath tub in the shape of a rectangular prism is 20 meter long, 10 meter wide and 5 meter deep.
How much water can it hold?

Volume = _____

Name : _____

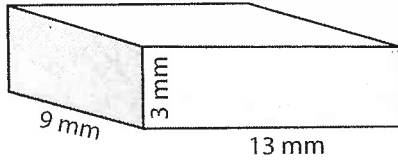
Score : _____

ES1

Surface Area - Rectangular Prism

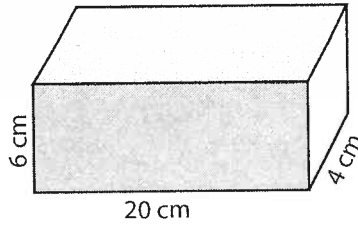
Find the surface area of each rectangular prism.

1)



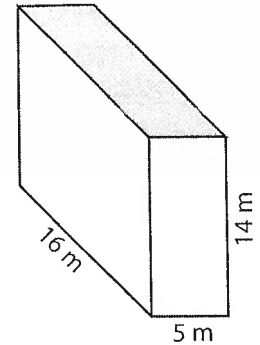
Surface Area = _____

2)



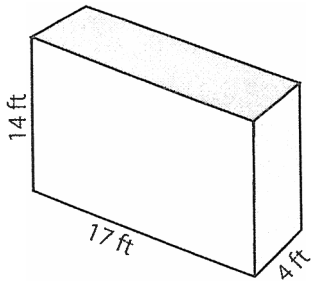
Surface Area = _____

3)



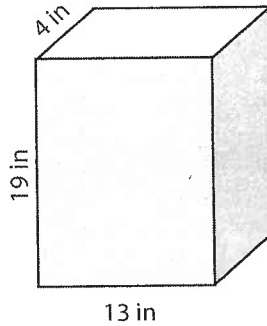
Surface Area = _____

4)



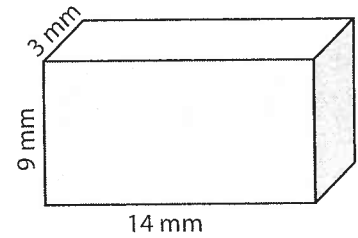
Surface Area = _____

5)



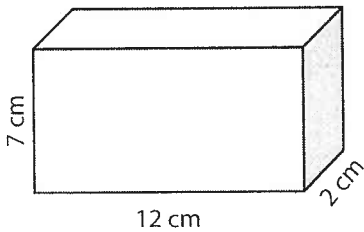
Surface Area = _____

6)



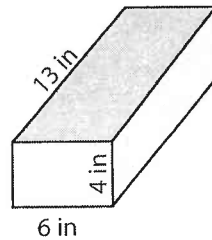
Surface Area = _____

7)



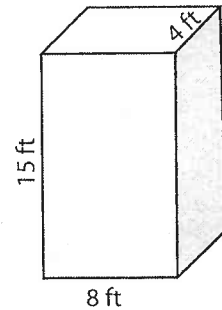
Surface Area = _____

8)



Surface Area = _____

9)

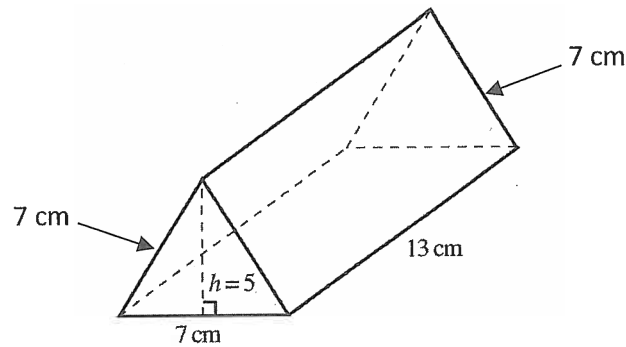


Surface Area = _____

- 10) A gift box in the shape of a rectangular prism has 20 centimeters length, 14 centimeters width and 10 centimeters height. How much the paper will you need to wrap the gift box?

Find the Volume and Surface area of the triangular prisms below.

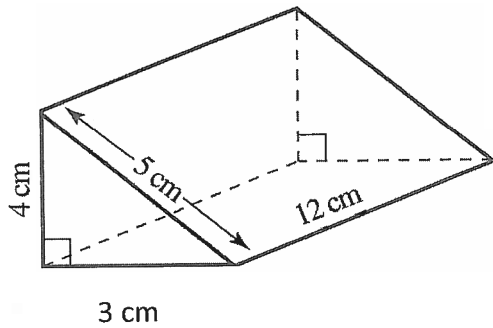
(B = area of the base, P = perimeter of the base, w = width, SA = surface area, V = volume)



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

$$SA = PW + 2B$$

$$V = BW$$



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

$$SA = PW + 2B$$

$$V = BW$$