Geometry Summer Review

Welcome to Geometry!

Often times over the summer it is easy to forget some of the things you have learned. Here at Calverton we like to send work home to be completed throughout the summer in order to help students start their next year off strong.

Please compete the attached worksheet throughout the summer and avoid completing them all in the week before school starts. Please make sure you show all your work along the way. This will count as your first grade and needs to be completed for the first day of school.

There is a video list to accompany the worksheets as well as a math help day for support in completing the required summer work.

Please email Mrs. Crissman acrissman@calvertonschool.org or Mr. Kerin wkerin@calvertonschool.org for any questions about the requirements.

Have a great summer!

Name:

Operations with Fractions

Solve each expression by hand. Simplify answers completely.

1. $\frac{5}{15} + \frac{2}{3} =$

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

3. $\frac{3}{5} - \frac{8}{16} =$

4. $\frac{3}{4} - \frac{7}{10} =$

5. $\frac{4}{15} \div \frac{5}{16} =$

6. $\frac{1}{10} - \frac{1}{18} =$

7. $\frac{12}{14} \div \frac{4}{9} =$

8. $\frac{8}{18} + \frac{3}{4} =$

9. $\frac{9}{12} + \frac{3}{4} =$

10. $\frac{11}{16} \times \frac{1}{2} =$

11. $\frac{10}{12} \times \frac{9}{20} =$

12. $\frac{8}{12} \times \frac{6}{20} =$

13. $\frac{10}{9} - \frac{4}{7} =$

14. $\frac{1}{6} - \frac{3}{8} =$

15. $\frac{1}{7} - \frac{2}{10} =$

16. $\frac{10}{6} + \frac{2}{3} =$

Name:

Simplify Radicals

Simplify the radicals. No decimals.

1. $\sqrt{720}$
2. $\sqrt{200}$
3. $\sqrt{525}$
4. $\sqrt{308}$
5. $\sqrt{864}$
6. $\sqrt{648}$
7. $\sqrt{384}$
8. $\sqrt{528}$
9. $\sqrt{572}$
10. $\sqrt{243}$
11. $\sqrt{360}$
12. $\sqrt{315}$

Name _____ Date _____Period_____

Rationalizing Denominators Worksheet

Rationalize each denominator. When possible, simplify by reducing the resulting fraction.

Ex.. $\frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{\sqrt{4}} = \frac{\sqrt{2}}{2}$

2. $\frac{2}{\sqrt{3}}$

3. $\frac{1}{\sqrt{7}}$

4. $\frac{6}{\sqrt{2}}$

5. $\frac{15}{\sqrt{5}}$

6. $\frac{42}{\sqrt{7}}$

7. $\frac{1}{\sqrt{81}}$

8. $\frac{2}{\sqrt{11}}$

9. $\frac{4}{\sqrt{2}}$

10. $\frac{1}{\sqrt{3}}$

11. $\frac{1}{\sqrt{225}}$

12. $\frac{1}{3\sqrt{16}}$

Solving Linear Equations **MAGIC SQUARE**

Directions: After solving each linear equation, sum up the rows and columns. They should all equal the same magic number!

$2x+1=7$	$\frac{x}{2}-4=-3$	$4x+12-x=-15$	$3x=2x+22$
$4(x-2)=20$	$13=-2x-17$	$\frac{x-8}{4}=3$	$2=\frac{x}{3}$
$-x-15-3x=x$	$5x-8=3x+30$	$\frac{x}{7}=3$	$-x-7=12$
$-18=-6(x-8)$	$\frac{2x}{3}=8$	$2(-2x+7)=-7(x+4)$	$9x-8x+1=10$

_____ _____ _____ _____

MAGIC NUMBER = _____

Name:

Distributive Property and Combining Like Terms

Simplify algebraic expressions using the distributive property.

Simplify

1. $4(3x + 1)$

2. $-5(5x - 4)$

3. $-(2x - 1)$

4. $12(x + 2)$

5. $\frac{1}{2}(6x - 14)$

6. $(-2x - 3)4$

7. $-21(x + y)$

8. $-7(x + 8)$

9. $a + b - 12 - x + 2a$

10. $8x - 3y + 8x + 3$

11. $2x + 16 – 3x + 4$

12. $x + y – 2x - 3y$

13. $–x – 9 + x – 18$

14. $3x – y + 4 + 2y – 9$

15. $12 + x – 9 + 3x$

16. $x + 4 – 3x – 4$

17. $\frac{1}{2}(2x + 4) – 9$

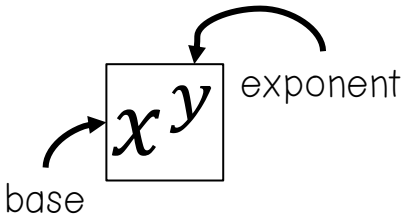
18. $–3(4x – 9 + x)$

19. $\frac{2}{3}(6x – 9) + 16$

20. $5 + x – (2x + 1)$

Name: _____ Date: _____ Block: _____

EXPONENT RULES Notes



$x^5 =$ _____

$3^4 =$ _____ = ____

In an exponential expression, the **base** is the number that gets multiplied by itself. The **exponent** tells you the number of times to multiply the base by itself.

$\boldsymbol{x^a \cdot x^b = x^{a+b}}$ $x^3 \cdot x^4 =$ ____ $p^2 \cdot p^{-1} =$ ____ $y^{-6} \cdot y^{10} =$ ____ $y^6 \cdot y =$ ____	$\boldsymbol{(x^a)^b = x^{a \cdot b}}$ $(k^2)^3 =$ ____ $(r^4)^9 =$ ____ $(a^6)^{1/2} =$ ____ $(p^3)^{1/3} =$ ____
$\boldsymbol{\frac{x^a}{x^b} = x^{a-b}}$ $\frac{x^4}{x^3} =$ ____ $\frac{x^5}{x^{-1}} =$ ____ $\frac{x^9}{x^5} =$ ____ $\frac{x^3}{x} =$ ____	$\boldsymbol{(x \cdot y)^a = x^a \cdot y^a}$ $(ab)^5 =$ ____ $(p \cdot q)^4 =$ ____ $(3x)^3 =$ ____ $(-2y)^2 =$ ____
$\boldsymbol{\left(\frac{x}{y}\right)^a = \frac{x^a}{y^a}}$ $\left(\frac{x}{y}\right)^4 =$ ____ $\left(\frac{a}{b}\right)^3 =$ ____ $\left(\frac{2}{y}\right)^5 =$ ____ $\left(\frac{a}{3}\right)^3 =$ ____	$\boldsymbol{x^0 = 1}$ $3^0 =$ ____ $y^0 =$ ____ $(x+4)^0 =$ ____ $(xyz)^0 =$ ____

$x^{-a} = \frac{1}{x^a}$	$\frac{1}{x^{-a}} = x^a$
$x^{-3} =$ ____ $\quad a^{-1} =$ ____	$\frac{1}{x^{-2}} =$ ____ $\quad \frac{1}{x^{-3}} =$ ____
$3^{-1} =$ ____ $\quad 3^{-2} =$ ____	$\frac{1}{3^{-3}} =$ ____ $\quad \frac{1}{2^{-2}} =$ ____

Let's piece it all together. Final answers should contain positive exponents only.

$(x^2y^3)(x^4y^{-4})$	$(2a^2b^4a^2)^5$	$(xy^2)^3(x^2y^3)^3$
$\frac{a^4}{a^9}$	$\frac{p^4q^6}{p^2q^8}$	$\frac{2x^2y^3}{4xy^5}$
$(2pq^2)^2(4q)$	$(2x^{-2}y^3)^3$	$\left(\frac{2ab^2c^3}{3a^2c}\right)^{-3}$

Name: _____ Date:_____ Block: _____

EXPONENT RULES *Practice*

Simplify the following exponential expressions. Final answers should contain positive exponents only.

1. $x^3 * x^4$	2. $(a^3)^4$	3. $\frac{p^5}{p^2}$
4. $(a^2bc^4)^3$	5. $\frac{x^2}{x^5}$	6. $(3x^2)^3$
7. $(a^3b^2)(a^5b^{-5})$	8. $(3a^3b^{-1}a)^2$	9. $(2pq^2)^2(pq^2)^4$
10. $\frac{a^5}{a^9}$	11. $\frac{x^4y^2}{x^3y^3}$	12. $\frac{3x^4y^2}{9xy^6}$
13. $(3xy^3)^3(2x)$	14. $(3a^{-1}b^2)^3$	15. $\left(\frac{a^2b^2c^3}{a^2c}\right)^{-1}$
16. $(4ab^{-2})^2(4b)^{-1}$	17. $\left(\frac{3xy^2z^3}{4x^2z}\right)^{-2}$	18. $\left(\frac{2ab^2c^3}{3a^2c}\right)^{-3}$

Name:

Solving Expressions and Equations

Solve the following expressions. Show all work.

1. Solve for E given: $E=mc^2$
   m =12.6kg
   c = 3×10^8 ms^{-1}

2. Solve for F given: $F = \frac{Gm_1m_2}{r^2}$

   G= 6.67×10^{-11} $\frac{Nm^2}{kg^2}$
   m_1= 15kg
   m_2 = 20kg
   r= 4.24 m

3. Solve for d given: $d = \frac{1}{2}at^2$

   a = - 9.81 m/s^2
   t = 9 sec

4. Solve for z given: $z = \frac{2x^2}{y}$

   x = 12
   y = 82

5. Solve for s given: $s= \frac{5n}{2p^2}$

   n = 8.3
   p = 2.7

6. Solve for a_c given: $a_c = \frac{v^2}{r}$

   v = 18.2 m/s
   r = 144 m

7. Solve for T given: $T = 2\pi\sqrt{\frac{l}{g}}$

   l = 0.45 m
   g = 9.8 m/s^2

Solve for x.

8. $x^2 = 23$

9. $12 = x^2 + 5$

10. $\frac{3}{x^2} = 15$

11. $\sqrt{x} = 2.3$

12. $\sqrt{x-2} = 5$

13. $13 = \frac{\sqrt{x}}{4}$

Name:

Point-Slope Form

Write an equation in point-slope form for each question.

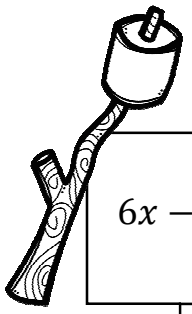
1. Line goes through point (-2 , -5) and m = 3	2. Line goes through point (-5 , -2) and m = 3
3. Line goes through point (2 , 5) and m = 3	4. Line goes through point (5 , 2) and m = 3
5. Line goes through point (-9 , -3) and m = $\frac{1}{3}$	6. Line goes through point (-3 , -9) and m = $\frac{1}{3}$
7. Line goes through point (-4 , 16) and m = $-\frac{1}{2}$	8. Line goes through point (-3 , -9) and m = $\frac{1}{3}$
9. Line goes through point (4 , -16) and m = $-\frac{1}{2}$	10. Line goes through point (-16 , 4) and m = $-\frac{1}{2}$
11. 1Line goes through point (2 , -8) and m = -4	12. Line goes through point (2 , 8) and m = -4

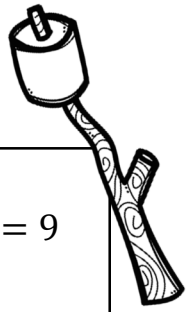
Name:

S'more Standard to. Slope-Intercept Practice Worksheet

Name:

S'more standard to slope-intercept practice





$6x - 5y = -5$

$y = \frac{11}{8}x - 3$

$11x - 8y = 24$

$y = \frac{3}{4}x + 5$

$3x - 4y = -20$

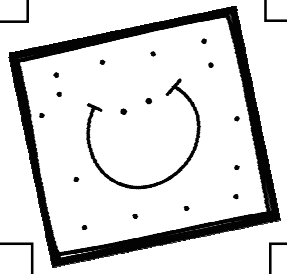
$y = -\frac{1}{3}x + 3$

$x + 3y = 9$

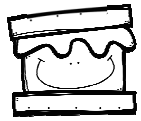
$y = \frac{6}{5}x + 1$

$y = -\frac{11}{8}x - 3$

$y = \frac{3}{4}x - 20$



$y = -\frac{1}{2}x - 3$



Finish

$y = -\frac{3}{2}x - 8$

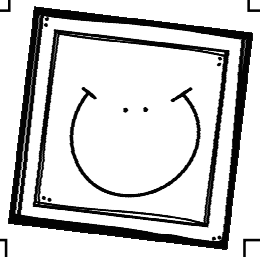
$3x + 2y = -8$

$y = \frac{15}{7}x + 7$

$15x - 7y = -49$

$y = 2x + 7$

$x + 2y = -6$



$y = \frac{4}{5}x - 4$

$y = -\frac{3}{2}x - 4$

$y = -2x + 4$

$y = \frac{1}{2}x - 3$

Start

$4x - 5y = 20$

$y = -\frac{5}{2}x + 2$

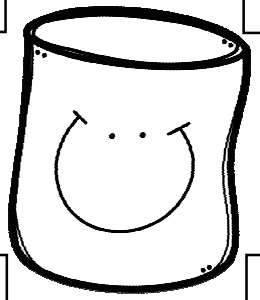
$5x - 2y = -4$

$y = 2x + 4$

$2x + y = 4$

$y = -x + 3$

$x - y = 3$



$y = -\frac{13}{5}x - 6$

$y = \frac{5}{2}x + 2$

$y = \frac{7}{5}x - 3$

$y = x - 3$

$13x + 5y = -30$

$y = -\frac{1}{2}x + 7$

$x + 2y = 14$

$y = -\frac{7}{5}x - 3$

$7x - 5y = 15$

$y = -4x - 16$

$4x + y = -16$

NAME_____ DATE_____ CLASS_____

Algebra Skill Builder – Literal Equations 2

Instructions: Solve each literal equation for the specified variable.

1. Solve for g: $dg = h$	**7.** Solve for a: $p = \frac{w}{ab}$
2. Solve for t: $k = \frac{p}{t}$	**8.** Solve for y: $2x + y = 5$
3. Solve for x: $r = s - x$	**9.** Solve for x: $k = \frac{y}{x}$
4. Solve for w: $q = wh$	**10.** Solve for b: $z = \frac{b}{cd}$
5. Solve for f: $ab = fc$	**11.** Solve for w: $q = \frac{jk}{w}$
6. Solve for q: $d = hkq$	**12.** Solve for h: $V = lwh$

NAME_____ DATE_____ CLASS_____

13. Solve for k: $ab = kx$	**19.** Solve for z: $k = az + b$
14. Solve for r: $C = 2\pi r$	**20.** Solve for b: $y = mx + b$
15. Solve for x: $x + 5y = 10$	**21.** Solve for h: $w = hjk$
16. Solve for b: $A = \frac{1}{2}bh$	**22.** Solve for c: $\frac{a}{b} = \frac{c}{d}$
17. Solve for p: $x = \frac{bc}{pq}$	**23.** Solve for x: $ax + by = c$
18. Solve for d: $t = \frac{d}{r}$	**24.** Solve for h: $A = \frac{1}{2}h(b + c)$

Name:

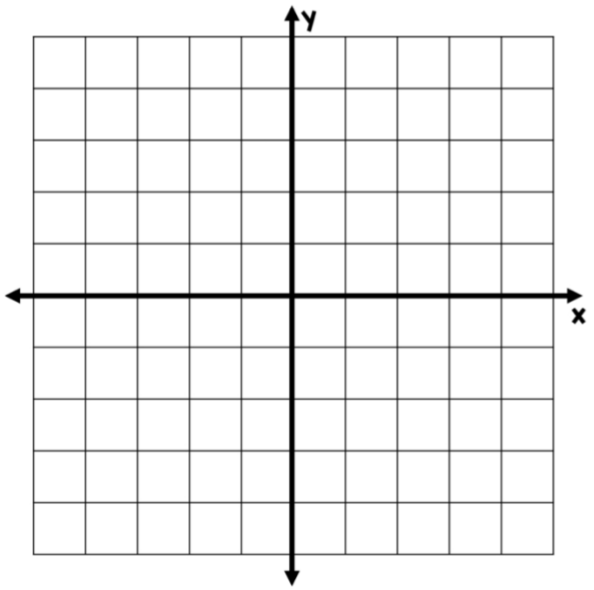
Graphing Linear equation

Directions: Determine the slope and y-intercept of the linear equations. Then graph the linear equation using the y-intercept and slope. Be sure to extended your line past the points and add arrows.

1. $y = \frac{2}{5}x - 4$

slope: _____

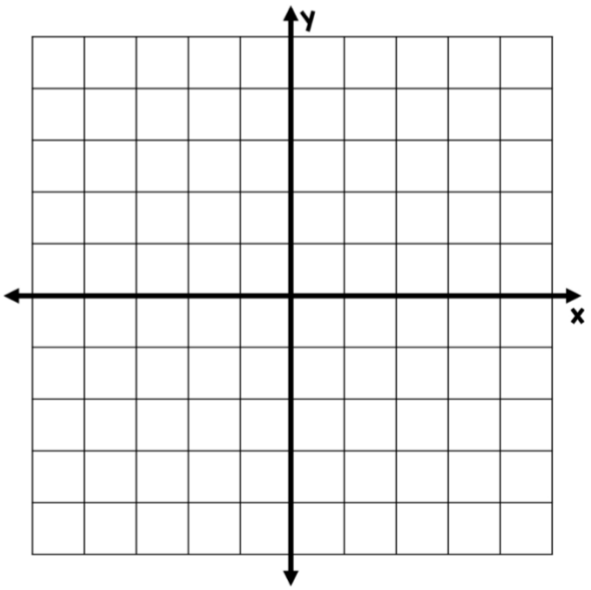
y-intercept: _____



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

slope: _____

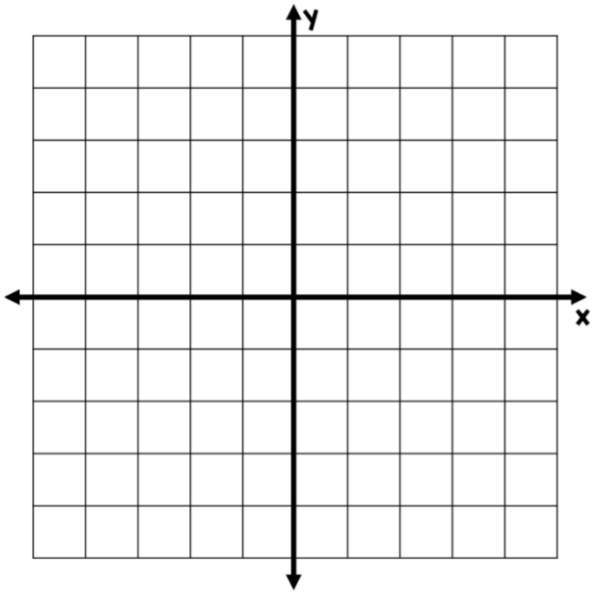
y-intercept: _____



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

slope: _____

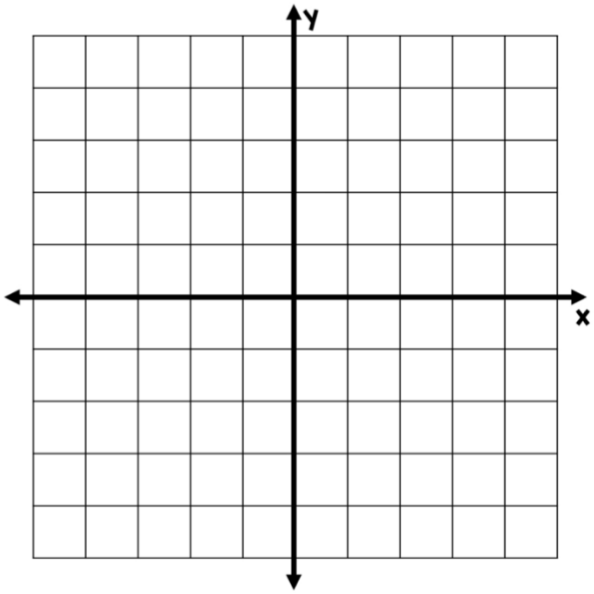
y-intercept: _____



4. $y = 2x - 1$

slope: _____

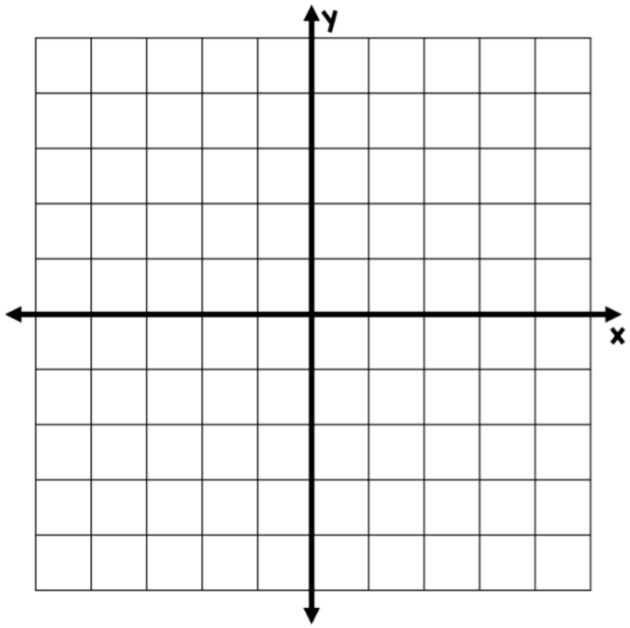
y-intercept: _____



5. $y = x + 3$

slope: _____

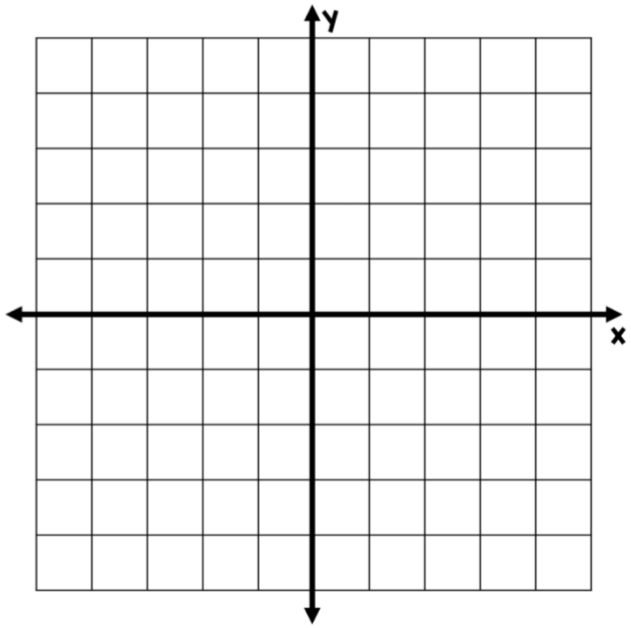
y-intercept: _____



6. $y = -x + 2$

slope: _____

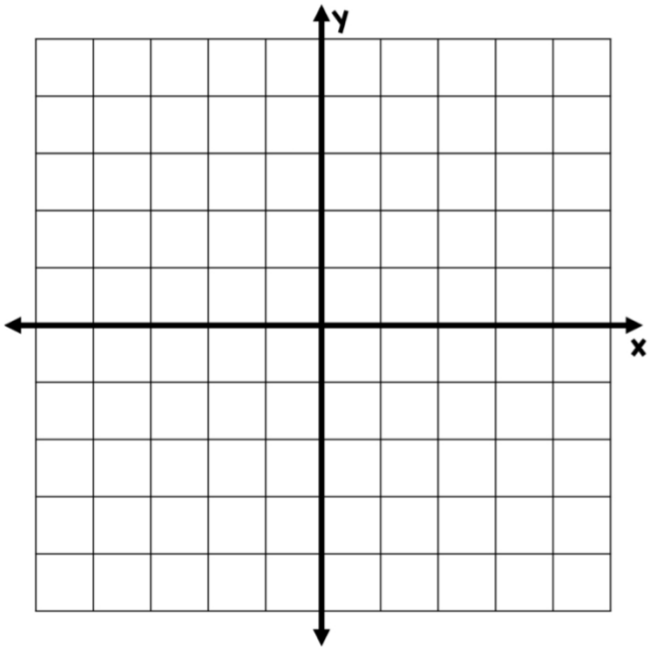
y-intercept: _____



7. $y = \frac{6}{5}x - 3$

slope: _____

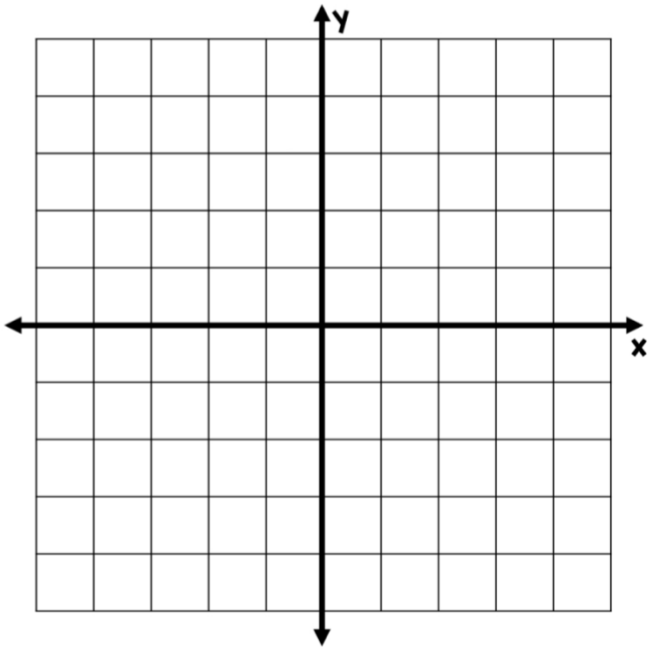
y-intercept: _____



8. $y = -\frac{7}{3}x + 5$

slope: _____

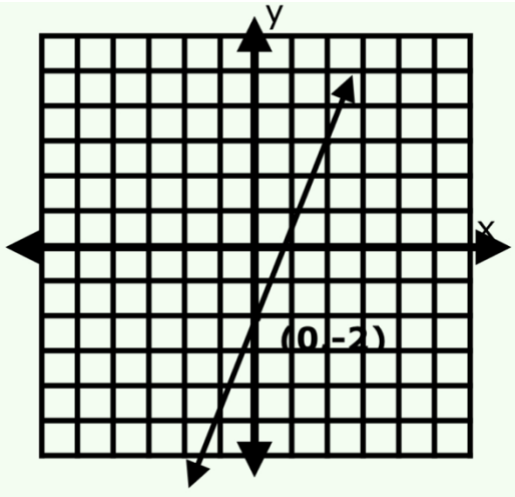
y-intercept: _____



Name:

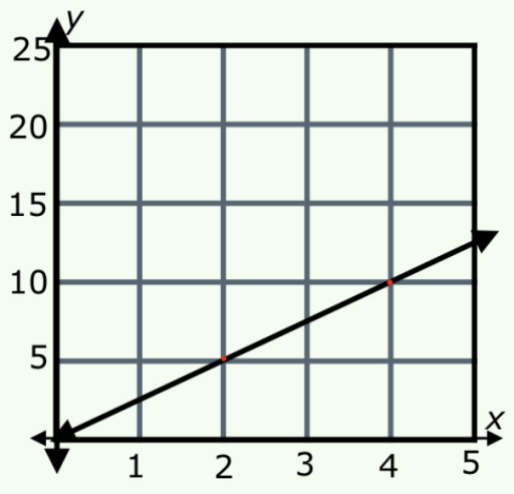
Write Equations form Graph

Find the slope and y-intercept for each problem. Write the slope-intercept equation for each problem.

1. 

$m =$ $b =$

$y =$ _____ $x +$ _____

2. 

$m =$ $b =$

$y =$ _____ $x +$ _____

3.

x	0	1	2	3
y	5	8	11	14

$m =$ $b =$

$y =$ _____ $x +$ _____

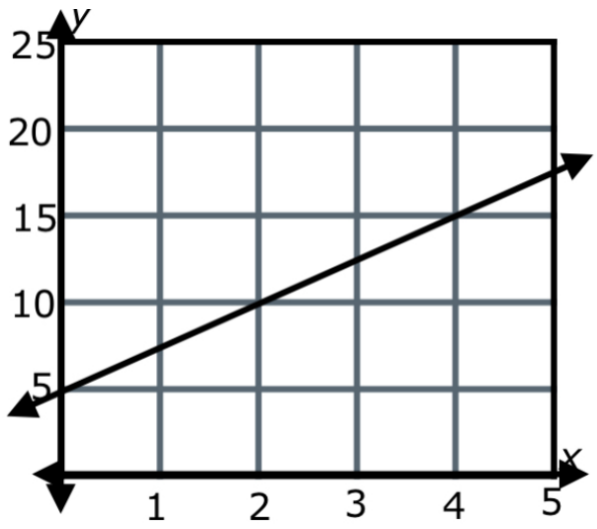
4.

x	y
1	5
2	7
3	9
4	11

$m =$ $b =$

$y =$ _____ $x +$ _____

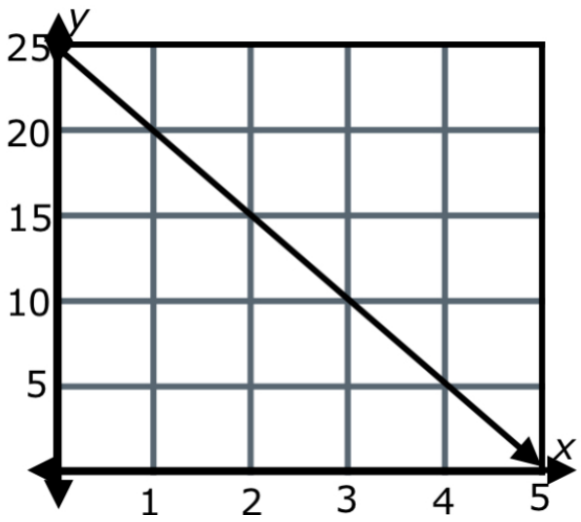
5.



$m =$ $b =$

$y =$

6.



$m =$ $b =$

$y =$

7.

x	1	2	3	4
y	-5	-2.5	0	2.5

$m =$ $b =$

$y =$

8.

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

$m =$ $b =$

$y =$

Graphing and Analysis

We create scatterplots to help us discover relationships or associations between two quantitative variables. When creating a scatterplot to represent data, there certain aspects we need to consider such as labeling the axes, creating an appropriate scale and providing a title.

Labeling Axes:

When labeling axes we need to consider what variable will go on the x-axis and which will go on the y-axis. The variable on the x-axis is the input or independent variable. This is the variable we think may influence the output. Often this will be time. For example, as time passes we may expect that a ball drops further, the distance a person travels increases, etc. The variable on the y-axis is the output or dependent variable. This is the variable we believe may be influenced by the input.

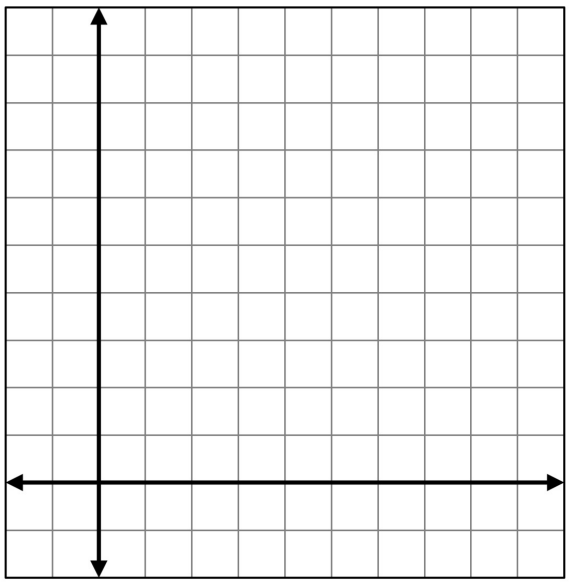
Consider the following situation: Sam is driving to school. His distance from at various times after he left is represented in the table below.

Time (min)	5	10	15	20	25	30	35
Distance from home (km)	3	8	10	15	21	24	30

Which variable should be placed on the x-axis and which should be placed on the y-axis? Label the axes on the graph below.

Creating an Appropriate Scale:

After we determine which variable goes on which axis, we need to determine an appropriate scale. Sometimes it makes sense to go up by units of 1, but often times the data will not fit if we automatically increase by 1. Consider how many gridlines there are to help make the decision. For instance, here we see there are 10 gridlines to the right of the x-axis. If we need to fit times up to 35 minutes, it may make sense to let each gridline represent 5 minutes. Determine an appropriate scale for each axis and write it on the graph. Then plot the data.



Provide a Title:

Be sure to title the graph in a way that represents the information that is being displayed.

Line of Best Fit

After plotting data, we may want to create something called a line of best fit or trendline. This is a line that generally represents the data. You can using graphing software to determine an exact line of best fit or you can approximate what it may be by hand.

If sketching in a line of best fit by eye, try to draw a line that you feel best represents all of the data present. Approximately the same number of data points should be on both sides of the line.

Draw the line of best fit in on the graph on the previous page.

Follow-up Questions:

1. Using your line of best fit, approximately how many miles has Sam traveled after 17 minutes?

2. In this instance, what does the y-intercept (where your line of best fit crosses y-axis) represent?

3. What is happening to the distance, in general, as the time since Sam left home increases?

Name:

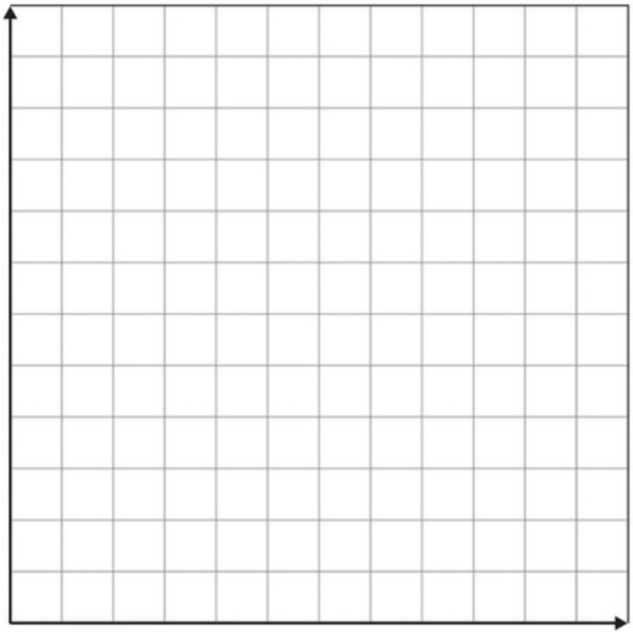
Data Analysis

1. The table shows Miranda's math quiz scores for the last five weeks. Use the data below to answer the following questions.

   a. Calculate the mean and median of the quiz scores.

Week	Score
1	50
2	51
3	65
4	72
5	80

   b. Make a scatter plot of the data. Choose and label an appropriate scale. Label the axis and scatter plot. Plot and label the mean point.



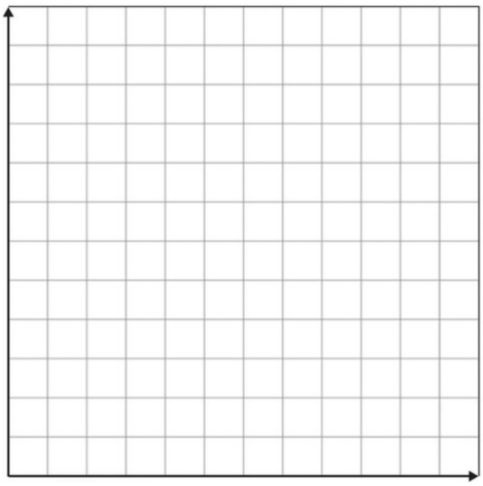
1. Scientists have determined that there may be a relationship between temperature and the number of chips produced by crickets. The table gives the temperature and the number of chirps per minute for several cricket samples. Use the data below to answer the following questions.

Temperature (˚F)	Chirps/min
71	138
68	97
75	152
80	158
60	81
75	155
84	165

   a. Calculate the mean and median of the temperature.

   b. Calculate the mean and median of the chirps per minute.

   c. Make a scatter plot of the data. Choose and label an appropriate scale. Label the axis and scatter plot. Plot and label the mean point.



   d. Does there appear to be a relationship between temperature and chirps? Explain.

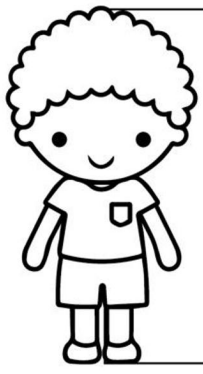
   e. Suppose the outside temperature is 65˚. About how many chirps per minute would you expect from a cricket?

   f. Suppose the outside temperature is 55˚. About how many chirps per minute would you expect from a cricket?

METRIC CONVERSION

Comparing lengths

Directions: Write the larger measurement on the line. If they are equal, write "equal".



Metric Units of Length

1 cm = 10 mm
1 m = 100 cm
1 km = 1,000 m

1. 20 cm or 20 mm → _____
2. 25 m or 2,550 cm → _____
3. 3,500 m or 4 km → _____
4. 7 km or 7,000 m → _____
5. 280 m or 20,800 cm → _____

Directions: Compare the measurements using the symbols <, > or =.

4 cm	.....	35 mm	8 m	.....	80 cm
600 cm	.....	6 m	9 km	.....	9,900 m
5,000m	.....	500 km	77 cm	.....	700 mm
45 mm	.....	20 cm	10 m	.....	1,000 cm
2,000m	.....	3 km	498 km	.....	4,980 m

METRIC CONVERSION

Metric units of capacity: milliliters & liters

Directions: Convert liters to milliliters

15 L=.....mL	54 L=.....mL
3 L=.....mL	2 L=.....mL
5 L=.....mL	0.83 L=.....mL
0.7 L=.....mL	0.46 L=.....mL
92 L=.....mL	4.4 L=.....mL

Directions: Convert milliliters to liters

600 mL=.....L	20000 mL=.....L
1000 mL=.....L	4000 mL=.....L
70 mL=.....L	400 mL=.....L
10000 mL=.....L	300 mL=.....L
3000 mL=.....L	5000 mL=.....L

METRIC CONVERSION

Mass & weight word problems

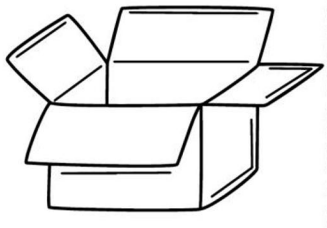
Anna buys 1 package of ground beef and 4 bags of sugar. The mass of the beef is 1250 g and each bag of sugar weighs 600 g. How much weight did Anna have to carry? Express your answer in kilograms and grams.

Chef Tom ordered 4 sacks of skim milk and 3 sacks of corn-starch. Each sack of skim milk weighs 10.5 kg. How much skim milk did Chef Tom order?

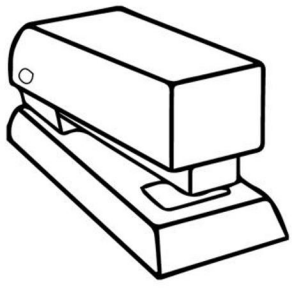
The weight of Mr. and Mrs. Smith together with their son Mark is 184 kilograms. Mr. Smith weighs 78 kg and Mrs. Smith is 6 kg lighter than him. What is the Mark's weight?

One pencil crayon weighs 9 g. What is the weight of a box of 8 pencil crayons?

8 pieces of cardboard weigh 48 g. What is the weight of 1 piece of cardboard?



A glue stick weighs 57 grams, and a stapler weighs 126 grams heavier than the glue stick. What is the weight of a stapler?



Conversion between degrees and radian

To convert an angle measured in degrees to radians, multiply by $\frac{\pi}{180}$.

To convert an angle measured in radians to degrees, multiply by $\frac{180}{\pi}$.

For example:

Ex 1) 225°=_____(radians)

a. To convert to radians you should multiply by _____.

b. You should only focus on _____ and write π after the fraction is reduced.

c. _____ = _____.

d. The answer is _____.

Ex 2) $\frac{5\pi}{9}$ = _____(degrees)

a. To covert to degrees you should multiply by _____.

b. Since the π's cancel each other, we should only focus on the _____.

c. _____ = _____.

d. The answer is _____.

Ex 3) An angle representing one complete revolution of the unit circle measures 2π radians, formerly _____°.

1. Change the following radians to degrees if $2\pi = 360°$,

a) π = _____

b) $\frac{\pi}{2}$ = _____

c) $\frac{\pi}{4}$ = _____

d) $\frac{3\pi}{4}$ = _____

e) $\frac{11\pi}{6}$ = _____

2. Change the following degrees to radians if $360° = 2\pi$,

a) 270° = _____

b) 60° = _____

c) 150° = _____

d) 30° = _____

e) 240° = _____

Practice with Scientific Notation

Express the following in Scientific Notation:

1) An amazing 250,000,000 Americans are now subscribers to some sort of cell phone plan.

2) There are more than 500,000,000 people on facebook.

3) The average American drinks 600 sodas a year.

4) The human body contains 70,000 miles of blood vessels.

5) Because of very high inflation, in the 1920s 1 American dollar = 4,000,000,000,000,000,000 German marcs.

6) Proportionally, if a flea were a person, that person could jump 1,000 feet high.

7) America spends $300,000,000 on clothes per day.

8) If you drop a penny off the Empire State Building it would go about 106 MPH.

Express the following in Standard Form:

1) 1.09×10^{3}

2) 4.22715×10^{8}

3) 3.078×10^{-4}

4) 9.004×10^{-2}

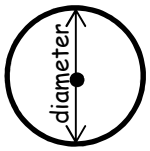
5) 5.1874×10^{2}

Name: …… **Date:** ……

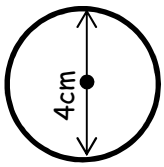
Circles.

The **circumference** is the distance round the outside of a circle. The formula is:

Circumference = π x diameter = πd



Example:

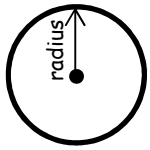


Circumference = π x 4 = 12.6cm (to 1d.p)

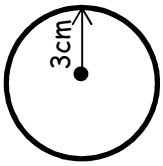
Area is measured in square units.

The formula for the **area** of a circle is:

Area = π x (radius)² = πr²



Example:



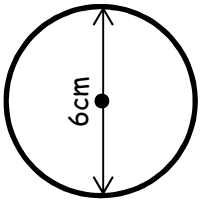
Area = π x 3²

= π x 9 = 28.3cm² (to 1d.p)

Use the formulae to solve the following problems.

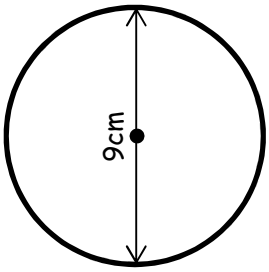
1

Calculate the circumference and area of this circle.



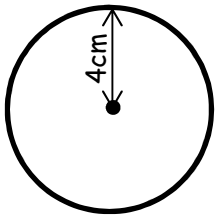
2

Calculate the circumference and area of this circle.



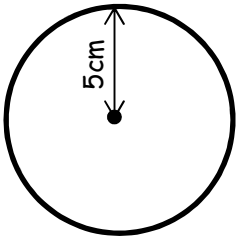
3

Calculate the circumference and area of this circle.



4

Calculate the circumference and area of this circle.



5

Calculate the diameter of a circle if its circumference is 25.1cm.

6

Calculate the radius of a circle if its circumference is 37.7cm.

7

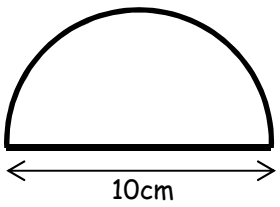
Calculate the radius of a circle if its area is 153.9cm².

8

Calculate the diameter of a circle if its area is 113.1cm².

9

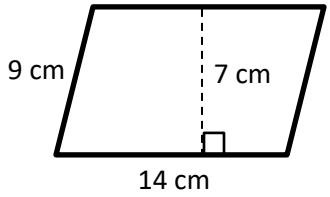
Calculate the perimeter and area of this semi-circle.



Name_____ **Class**_____ **Date** _____

Perimeter and Area of Parallelograms, Triangles, Trapezoids

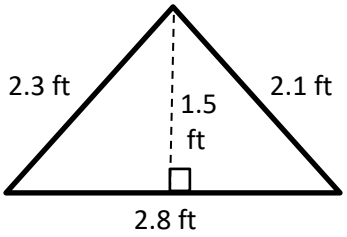
1.



P = _____

A = _____

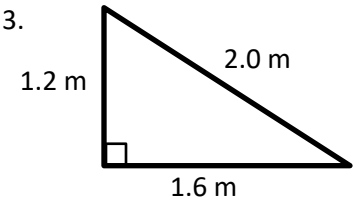
2.



P = _____

A = _____

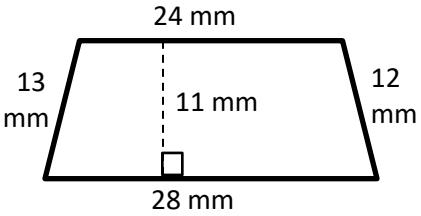
3.



P = _____

A = _____

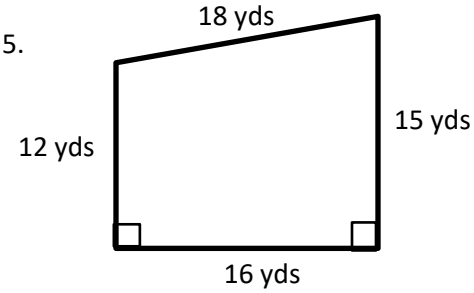
4.



P = _____

A = _____

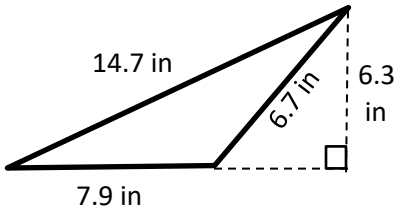
5.



P = _____

A = _____

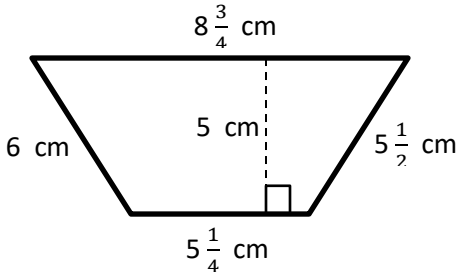
6.



P = _____

A = _____

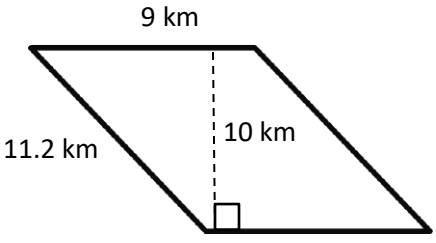
7.



P = _____

A = _____

8.



P = _____

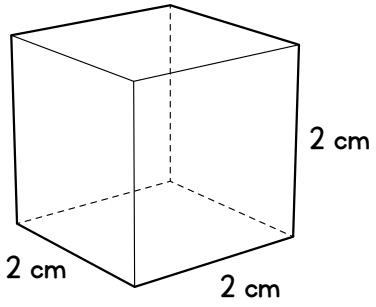
A = _____

Name: _____

Surface Area

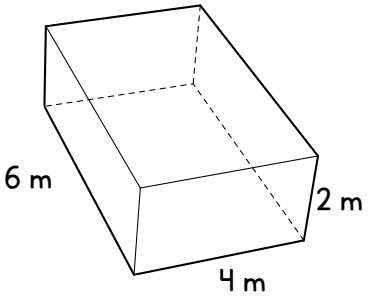
Surface area: The total area of the 2-dimensional surfaces that make up a 3-dimensional object.

Area of a rectangle: A = bh



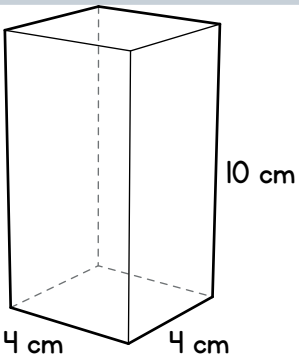
Front _____
Back _____
Top _____
Bottom _____
Side _____
Side _____

Surface area _____



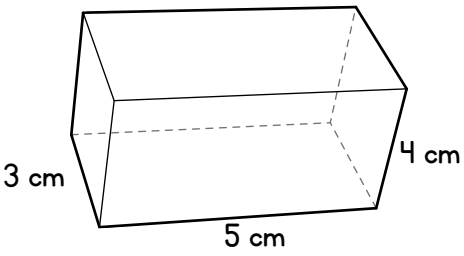
Front _____
Back _____
Top _____
Bottom _____
Side _____
Side _____

Surface area _____



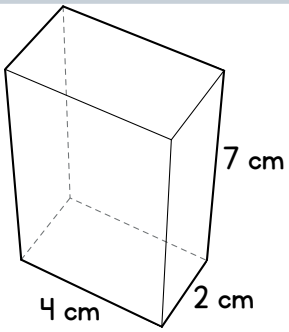
Front _____
Back _____
Top _____
Bottom _____
Side _____
Side _____

Surface area _____



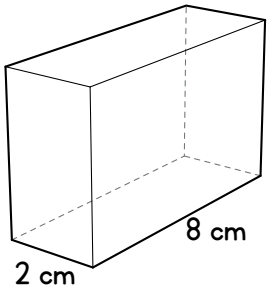
Front _____
Back _____
Top _____
Bottom _____
Side _____
Side _____

Surface area _____



Front _____
Back _____
Top _____
Bottom _____
Side _____
Side _____

Surface area _____

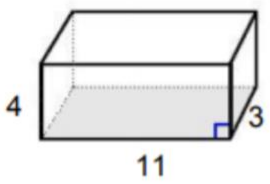
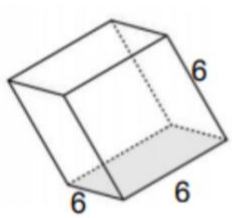
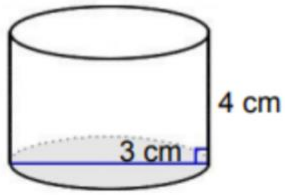


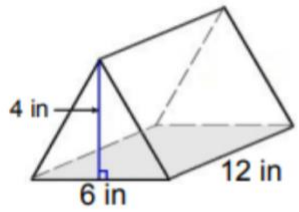
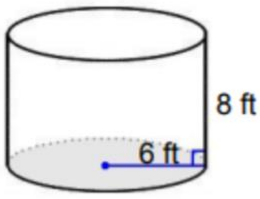
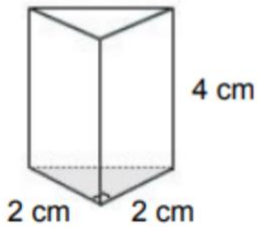
Front _____
Back _____
Top _____
Bottom _____
Side _____
Side _____

Surface area _____

Name:

Volume or Prisms and Cylinders

1. 	Base Formula	Area of the Base Work-	Base- Height- Volume-
2. 	Base Formula	Area of the Base Work-	Base- Height- Volume-
3 	Base Formula	Area of the Base Work-	Base- Height- Volume-

4. 	Base Formula	Area of the Base Work-	Base- Height- Volume-
5. 	Base Formula	Area of the Base Work-	Base- Height- Volume-
6. 	Base Formula	Area of the Base Work-	Base- Height- Volume-

9th Grade Mathematics Review Videos

Operations with fractions
a. https://www.youtube.com/watch?v=PXC74Tm7yBY

Simplify Radicals
a. https://www.youtube.com/watch?v=2vWzyxsVrbM
b. https://www.youtube.com/watch?v=G3ucF7dMXY4

Rationalizing Denominators
a. https://www.youtube.com/watch?v=TkigJgKmIjc
b. https://www.youtube.com/watch?v=gY5TvlHg4Vk
c. https://www.youtube.com/watch?v=5j8a75aHaSEA

Solving Linear Equations
a. https://www.youtube.com/watch?v=oIVpjrD4YvQ
b. https://www.youtube.com/watch?v=leNCHdO5Lec
c. https://www.youtube.com/watch?v=76E9K3JzjDM

Distributive Property and Combining Like Terms
a. https://www.youtube.com/watch?v=6uZVsxVQLbs
b. https://www.youtube.com/watch?v=54lHz07GSIA
c. https://www.youtube.com/watch?v=CLWpkv6ccpA&t=181s
d. https://youtu.be/FNnmseBlvaY

Exponent Rules
a. https://www.youtube.com/watch?v=LkhPRz7Hocg
b. https://www.youtube.com/watch?v=b4mSqcJND3I

Solving Expressions and Equations
a. https://www.youtube.com/watch?v=5lzsxE-ykRY
b. https://www.youtube.com/watch?v=XDp_tExqS5c

Point-Slope Form
a. https://www.youtube.com/watch?v=ri3WivGI75Y
b. https://www.youtube.com/watch?v=SemcMTLjSiw

Standard to slope-Intercept
a. https://www.youtube.com/watch?v=8kkfxJ_tIKI

Literal Equations
a. https://www.youtube.com/watch?v=5xcMQlshSJM
b. https://www.youtube.com/watch?v=EbzHG1mdj54

Graphing Linear Equation
a. https://www.youtube.com/watch?v=ruTcNElXdzQ

Write Equations form Graph
a. https://www.youtube.com/watch?v=qPJzMboAjI8

Graphing Analysis and Data Analysis

a. https://www.youtube.com/watch?v=B1HEzNTGeZ4
b. https://www.youtube.com/watch?v=NcgRa0uotXs
c. https://www.youtube.com/watch?v=8ODFBfEIX_k

Metric Conversion

a. https://www.youtube.com/watch?v=uHaKyNplino

Conversion between degrees and radian

a. https://youtu.be/O3jvUZ8wvZs
b. https://youtu.be/z0-1gBy1ykE

Scientific Notation

a. https://www.youtube.com/watch?v=ktaD_Qq2f0I
b. https://www.youtube.com/watch?v=PN93dIrSt7o

Circumference and Area of Circle (do not use 3.14, please use π button on your calculator)

a. https://www.youtube.com/watch?v=JC2kRM3jTOo
b. https://www.youtube.com/watch?v=_E0C5ECDS0U

Perimeter and Area of Parallelograms, Triangles, Trapezoids

a. https://www.youtube.com/watch?v=AAY1bsazcgM
b. https://www.youtube.com/watch?v=lsx1W2zuwHM

Surface Area of rectangular prism

a. https://www.youtube.com/watch?v=jREM6POLQUM

Volume of Prisms and Cylinders

a. https://www.youtube.com/watch?v=e7qgvHbdBuw
b. https://www.youtube.com/watch?v=PgxIad4c1ZI