

\*FYI

## FIFTH GRADE

## GRADE LEVEL EXPECTATIONS IN MATHEMATICS

This may be a good  
resource.

When entering sixth grade this is what is expected that your child should already know.

1. Understand the meaning of division of whole numbers and how to check your answers through multiplication. Ex.  $34 \div 5 = 6 \text{ r}4$ , so  $5 \times 6 = 30 + 4 = 34$ .
2. Fluently multiply a multi-digit number by a two-digit number.
3. Divide fluently up to a four-digit number by a two-digit number.
4. Find the prime factorization of numbers from 2 through 50, express in exponential notation.  
Ex.  $24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3^1$
5. Understand a fraction as a statement of division. Ex.  $2 \div 3 = \frac{2}{3}$
6. Multiply and divide 2 fractions and understand fact families.
7. Divide a fraction by a whole number and a whole number by a fraction.
8. Add and subtraction fractions using unlike denominators, using common denominators.
9. Multiply and divide by 10's, 100's and 1,000's using mental math.
10. Multiply up to 2-digits and decimals up to 2 digits.
11. Solve story problems with adding, subtracting, multiplying, dividing fractions and decimals.
12. Solve for the unknown in equations such as  $\frac{1}{4} + x = \frac{7}{12}$ .
13. Express fractions and decimals as percentages and vice versa.
14. Express ratios in several ways. Ex. 3 cups to 5 people,  $3 : 5$ ,  $\frac{3}{5}$ ; find equivalent ratios.
15. Recognize the equivalence of 1 liter, 1,000 ml and 1,000  $\text{cm}^3$  and conversion between.
16. Understand volume; cubic centimeter ( $\text{cm}^3$ ), cubic meter ( $\text{m}^3$ ), cubic inches ( $\text{in}^3$ ), cubic foot, ( $\text{ft}^3$ ), and cubic yard ( $\text{yd}^3$ ). Be able to compare one cubic inch to one cubic foot and one cubic centimeter to one cubic meter.
17. Convert measurements of length, weight, area, volume, and time within metric to metric and within standard measurement to standard measurement.
18. Know how to calculate the area of a triangle –  $A = \frac{1}{2} bh$  and area of a parallelogram  $A = bh$ .
19. Calculate the volume of a cube and rectangular prism.
20. Understand that the measurement of  $90^\circ$ ,  $180^\circ$ ,  $270^\circ$ , and  $360^\circ$  are associated respectively with  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ , and full turns.
21. Measure angles with a protractor and classify them as acute, right, obtuse and straight.
22. Find unknown angles in problems with angles on a straight line, vertical angles and surrounding a point.
23. Know angles on a straight line =  $180^\circ$  and angles surrounding a point add up to  $360^\circ$ .
24. Know the sum of the interior angles of a triangle is  $180^\circ$  and the sum of the interior angles of a quadrilateral is  $360^\circ$ .
25. Read, interpret, and solve problems involving line graphs.
26. Construct line graphs from tables of data; including axis labels and scale.
27. Calculate and interpret the mean and mode of a given set of data.
28. Solve multi-step problems involving means,

The following pages are grade 6 skills. I thought this cover sheet would help to understand prior skills that need to be reviewed.

### Excellent websites for fun learning and reinforcement of math skills:

[www.wildmath.com](http://www.wildmath.com) Select "Play the game". Select addition, subtraction or multiplication and grade. You can race to beat your time.

[www.harcourtschool.com](http://www.harcourtschool.com) Click the red box, select math, select HSPMath, select Michigan, click on the "5" ball or "6" ball for a challenge. Select a game.

[www.aplusmath.com](http://www.aplusmath.com) Go under "Flashcards" or "Game Room" on the left side of the screen. They can practice adding, subtracting and multiplying. Very important to know the addition, subtraction and multiplication facts from memorization or within a couple seconds.

[www.mathisfun.com](http://www.mathisfun.com) Select numbers then Math Trainer for adding, subtracting and multiplication. Or at the home screen select games and pick a game to play.

[www.eduplace.com](http://www.eduplace.com) Select your state – "Michigan" press submit. Select the student tab then click on the "mathematics" rectangle. Click in the center book "Houghton Mifflin Math 2007", Click on "Grade 5". Select any games. Extra Help and Extra Practice is good, also eGames.

[www.illuminations.nctm.org](http://www.illuminations.nctm.org) Select activities then select grade level. Click on Search.

[www.aaamath.com](http://www.aaamath.com) At the top pick "Fifth" or "Sixth" for a challenge. Choose any of the activities like multiplication then select "play" option toward the top of the screen. 20 Questions and Countdown games are good ones.

[www.funbrain.com](http://www.funbrain.com) Lots of fun games to choose from.

#### Other games and activities you can play:

- Take a deck of cards and remove the face cards (kings, queens, jacks). Aces are one. Divide the cards evenly among 2 players. Each player flips over a card. The first one to add the 2 numbers correctly the fastest wins the cards. After going through the pile of cards, the player with the most cards wins. You can do a multiplication version also.

## TERMS

**Edges:** This is all the straight lines of a figure. Like the edge of a desk.

**Faces:** This is the flat surface of a figure.

**Vertex:** This is all the corners of a figure.

**Right angle:** An angle at  $90^\circ$  like a corner of a piece of paper.

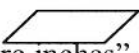
**Acute angle:** An angle smaller than a right angle.

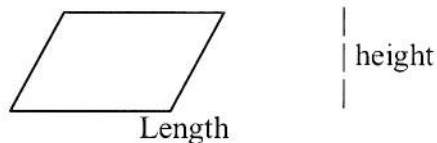
**Obtuse angle:** An angle larger than a right angle.

**Volume:** volume is length x width x height

**Perimeter:** You add up all the sides. (You are adding all lengths of the outer edges together.)

**Area:** Area of a square or rectangle = length (l) x width (w) answer is written in "square inches"  
(or whatever the measurement is)

*new \** Area of a parallelogram  is length x height.  
Answer written in "square inches" (or whatever measurement)



*\* new* Area of a triangle is  $\frac{1}{2}$  base x height or  $(\text{base} \times \text{height}) \div 2$

**Triangle:** Sum of the 3 interior angles of a triangle is always  $180^\circ$ .

**Quadrilateral:** Sum of the 4 interior angles in a quadrilateral is always  $360^\circ$ .

**Mean:** This is average. You add the set of number values and divide it by how many numbers you have.

**Median:** Arrange numbers from smallest to largest. What number is in the middle?  
That is the Median number.

**Mode:** What number occurs most often? This number is the mode.

**Range:** Subtract the largest number in the group from the smallest number in the group.  
This number is the range.

### **Conversion:**

60 seconds = 1 minute

60 minutes = 1 hour

365 days = 1 year

12 inches = 1 foot

3 feet = 1 yard

5,280 feet = 1 mile

24 hours = 1 day

12 months = 1 year

52 weeks = 1 year

10 millimeter = 1 centimeter (approx.  $3\frac{1}{2}$  centimeters = 1 inch)

100 centimeter = 1 meter (approx. 1 meter = 1 yard)

Liter to milliliter is the same as meter to millimeter

### **Fractions:**

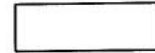
Adding and subtracting: you need to have the same common denominator (bottom) then, you + or - the numerators (top).

Multiplying: you multiply both numerators then you multiply both denominators. Convert to improper fractions if needed, no mixed numbers.

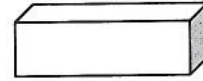
Dividing: convert to improper fractions; flip the second fraction in the equation then multiply.

## Formula Card:

Rectangle -  $A = l \cdot w$     $P = l + l + w + w$



Rectangular prism -  $V = l \cdot w \cdot h$



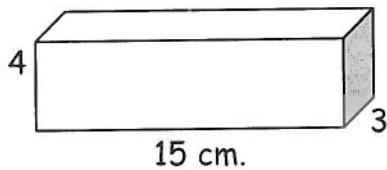
## Examples of different problems and the work that should accompany the problems:

Ex. 1 If  $M = 5$ , simplify the following:

$$\begin{aligned} M + 7 \\ 5 + 7 \\ 12 \end{aligned}$$

Ex. 2 Find the volume of the figures:

a)



$$V = l \cdot w \cdot h$$

$$V = 3 \times 15 \times 4$$

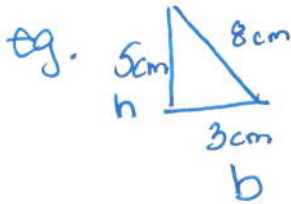
$$V = 180 \text{ cm}^3$$

*\* New Learning \**

Area of a triangle

$$A = \frac{b \cdot h}{2} \quad \text{or} \quad A = \frac{1}{2} b \cdot h$$

$h$  = height and it's the perpendicular line with the base. The base and height will form a right angle.



$$A = \frac{3 \cdot 5}{2}$$

$$A = \frac{15}{2}$$

$$A = 7.5 \text{ cm}^2$$

Please show any work you have done to complete each problem.

**Show your work! Show your work! Show your work!**

# Show your work! Show your work! Show your work!



Name \_\_\_\_\_

## Summer Review - Week #1



Complete each of the problems below. Please show all of your work.

1) Reduce each of the following fractions:

a)  $\frac{10}{15} = \text{---}$

b)  $\frac{8}{12} = \text{---}$

c)  $\frac{20}{30} = \text{---}$

d)  $\frac{6}{9} = \text{---}$

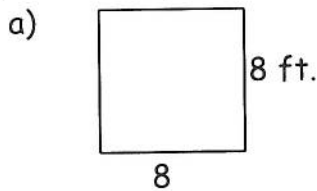
e)  $\frac{4}{6} = \text{---}$

f)  $\frac{12}{14} = \text{---}$

g)  $\frac{25}{50} = \text{---}$

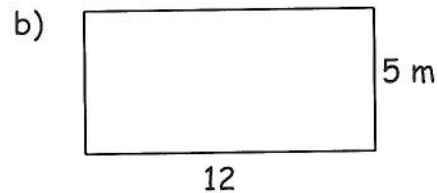
h)  $\frac{16}{20} = \text{---}$

2) Find the perimeter and area of the figures:



P =

A =



P =

A =

3) Find the greatest common factor (GCF) of the following sets of numbers:

a) 3, 4

b) 5, 10

c) 12, 26

d) 8, 12

4) If  $M = 10$ , simplify each of the following:

a)  $M + 6$

b)  $M - 7$

c)  $15 - M$

d)  $4M$

5) Change the following fractions to mixed numbers:

a)  $\frac{24}{7} = \text{---}$

b)  $\frac{13}{2} = \text{---}$

c)  $\frac{18}{10} = \text{---}$

d)  $\frac{7}{5} = \text{---}$



# Show your work! Show your work! Show your work!

Show your work! Show your work! Show your work!



6) Fill in the table with the corresponding fractions, decimals, and percents:

	Fractions	Decimals	Percents
a)	$\frac{1}{2}$	.5	50%
b)	$\frac{4}{25}$		%
c)	$\frac{4}{5}$		%
d)	—	.3	%

	Fractions	Decimals	Percents
j)	—	.42	%
k)	—	.56	%
l)	—		68%
m)	—		85%

7) Change the following mixed numbers to improper fractions:

a)  $3\frac{1}{8} = \text{—}$

b)  $5\frac{4}{7} = \text{—}$

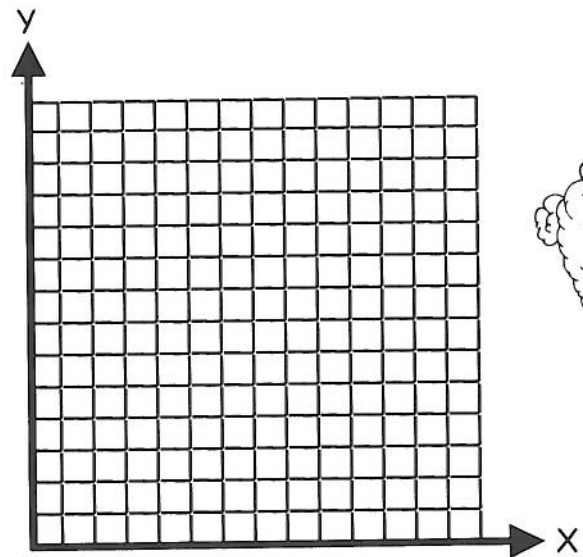
c)  $9\frac{1}{11} = \text{—}$

d)  $4\frac{2}{7} = \text{—}$

8) Graph each of the points.



X	Y
0	8
1	7
2	6
3	5
4	4
5	3
6	2
7	1



9) Maria has three red dresses, 2 white dresses, and one blue dress. What is the probability she will wear a blue dress at her party?



Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!

Name \_\_\_\_\_



## Summer Review - Week #

# 2

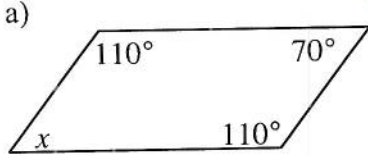
Complete each of the problems below. Please show all of your work.



1) Find the missing angles:

*\* New learning*

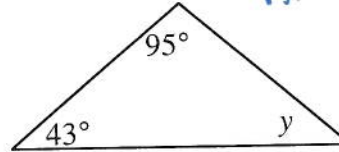
*All angles = 360°*



x =

b)

*All angles = 180°*



y =

*\* new*

2) Find the mean, median, mode, and range of the following set of numbers: 3, 8, 12, 5

*See reference sheet*

mean =

median =

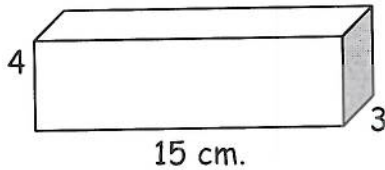
mode =

range =



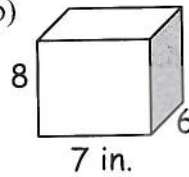
3) Find the volume of the figures:

a)



V = \_\_\_\_\_

b)



V = \_\_\_\_\_

4) Reduce each of the following fractions:

a)  $\frac{3}{27} = \frac{\quad}{\quad}$

b)  $\frac{4}{40} = \frac{\quad}{\quad}$

c)  $\frac{5}{60} = \frac{\quad}{\quad}$

d)  $\frac{6}{66} = \frac{\quad}{\quad}$

e)  $\frac{7}{28} = \frac{\quad}{\quad}$

f)  $\frac{8}{10} = \frac{\quad}{\quad}$

g)  $\frac{9}{45} = \frac{\quad}{\quad}$

h)  $\frac{10}{70} = \frac{\quad}{\quad}$

i)  $\frac{9}{36} = \frac{\quad}{\quad}$

j)  $\frac{14}{35} = \frac{\quad}{\quad}$

k)  $\frac{12}{18} = \frac{\quad}{\quad}$

l)  $\frac{22}{55} = \frac{\quad}{\quad}$

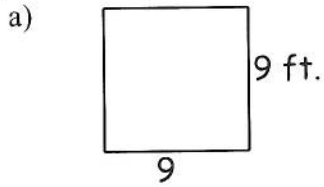
Show your work! Show your work! Show your work!



# Show your work! Show your work! Show your work!

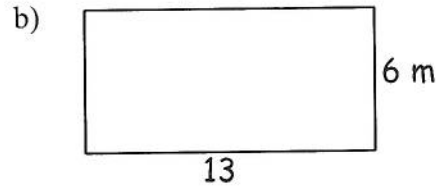


5) Find the perimeter and area of the figures:



P =

A =



P =

A =

6) Find the greatest common factor (GCF) of the following sets of numbers:

a) 18, 27

b) 36, 40

c) 42, 50

d) 8, 15

7) If  $M = 54$ , simplify each of the following:

a)  $M + 7$

b)  $M - 28$

c)  $91 - M$

d)  $3M$



8) Change the following fractions to mixed numbers:

a)  $\frac{23}{8} = \text{---}$

b)  $\frac{14}{3} = \text{---}$

c)  $\frac{19}{11} = \text{---}$

d)  $\frac{8}{7} = \text{---}$

e)  $\frac{17}{9} = \text{---}$

f)  $\frac{27}{8} = \text{---}$

g)  $\frac{35}{3} = \text{---}$

h)  $\frac{9}{4} = \text{---}$

9) Find the least common multiple (LCM) of the following sets of numbers:

a) 5, 6

b) 7, 8

c) 12, 15

d) 20, 30

10) Find the mean, median, mode, and range of the following set of numbers: 5, 5, 7, 5, 9, 11, 18

*\* now see reference sheet*

mean =

median =

mode =

range =



# Show your work! Show your work! Show your work!



# Show your work! Show your work! Show your work!

Name \_\_\_\_\_

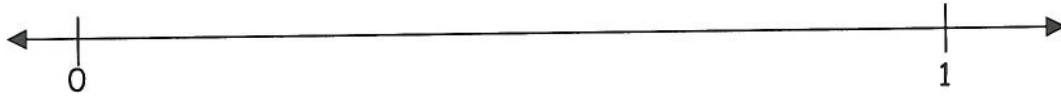


## Summer Review - Week #3

Complete each of the problems below. Please show all of your work.



- 1) Put the following fractions on the number line where they belong:  $\frac{5}{6}$ ,  $\frac{4}{5}$ ,  $\frac{2}{3}$



- 2) Find the prime factorization of each of the following numbers:

a) 18

b) 24

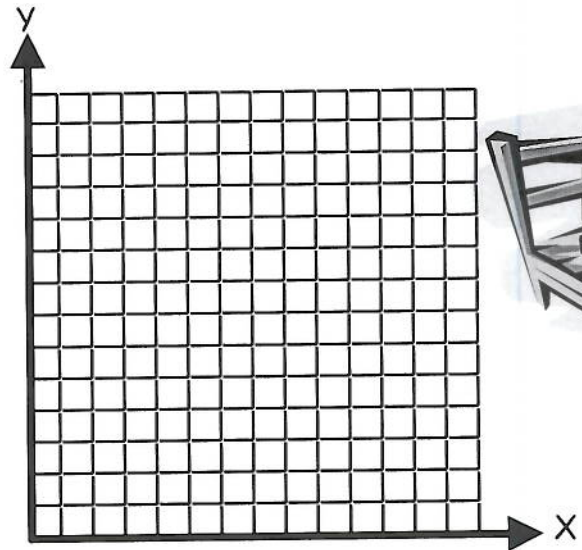
c) 38

d) 81

- 3) Graph each of the points.



X	Y
0	2
1	3
2	4
3	5
4	6
5	7
6	8
7	9



- 4) Frank is buying his first car and is stuck on what color it should be. He has to choose between three shades of green, two shades of blue or two shades of purple. What is the probability he will choose a green car?



- 5) Reduce each of the following fractions:

a)  $\frac{14}{49} = \frac{\quad}{\quad}$

b)  $\frac{16}{50} = \frac{\quad}{\quad}$

c)  $\frac{36}{40} = \frac{\quad}{\quad}$

d)  $\frac{20}{25} = \frac{\quad}{\quad}$

e)  $\frac{21}{60} = \frac{\quad}{\quad}$

f)  $\frac{18}{45} = \frac{\quad}{\quad}$

g)  $\frac{24}{54} = \frac{\quad}{\quad}$

h)  $\frac{45}{75} = \frac{\quad}{\quad}$

Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!

6) Fill in the table with the corresponding fractions, decimals, and percents:



	Fractions	Decimals	Percents
a)	$\frac{1}{4}$		%
b)	$\frac{7}{20}$		%
c)	$\frac{35}{50}$		%
d)	—	.31	%

	Fractions	Decimals	Percents
j)	—	.88	%
k)	—	.11	%
l)	—		78%
m)	—		22%

7) Change the following mixed numbers to improper fractions:

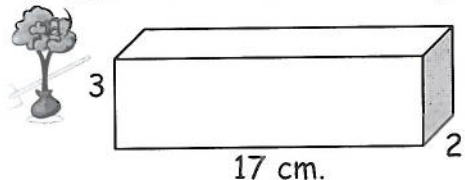
a)  $1\frac{2}{5} = \text{—}$

b)  $2\frac{3}{10} = \text{—}$

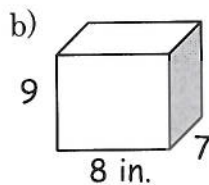
c)  $3\frac{5}{12} = \text{—}$

d)  $4\frac{3}{11} = \text{—}$

8) Find the volume of the figures:

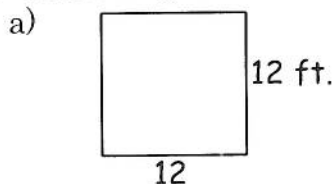


V = \_\_\_\_\_



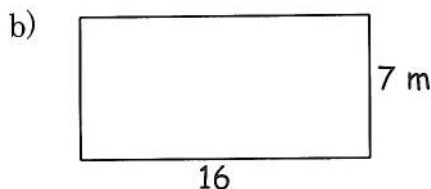
V = \_\_\_\_\_

9) Find the perimeter and area of the figures:



P =

A =



P =

A =



# Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!

Name \_\_\_\_\_



## Summer Review - Week # 4



Complete each of the problems below. Please show all of your work.

1) Change the following fractions to mixed numbers:

a)  $\frac{27}{10} =$  \_\_\_\_\_

b)  $\frac{16}{5} =$  \_\_\_\_\_

c)  $\frac{21}{13} =$  \_\_\_\_\_

d)  $\frac{10}{8} =$  \_\_\_\_\_

2) Find the least common multiple (LCM) of the following sets of numbers:

a) 12, 18

b) 6, 8

c) 9, 12

d) 15, 18

3) Put the following fractions on the number line where they belong:  $\frac{3}{10}, \frac{4}{9}, \frac{5}{8}$



4) Find the prime factorization of each of the following numbers:

a) 25

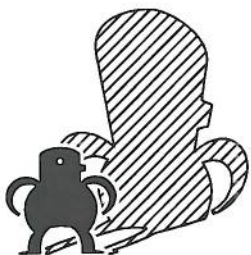
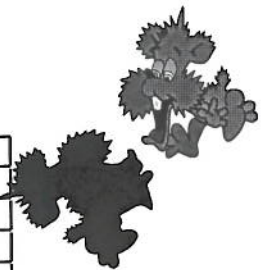
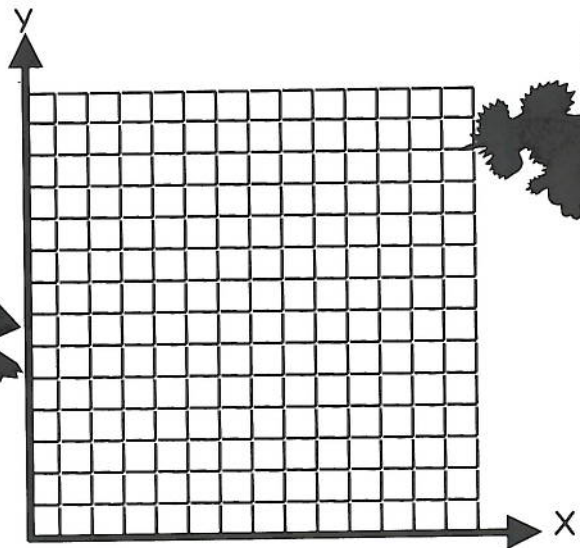
b) 36

c) 49

d) 64

5) Graph each of the points.

X	Y
0	0
1	2
2	4
3	6
4	8
5	10
6	12
7	14



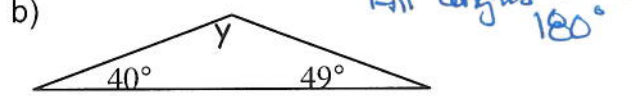
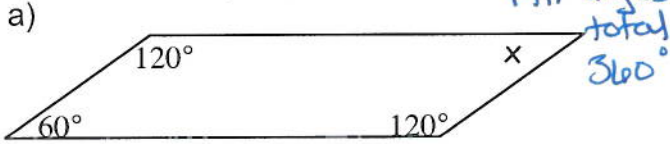
Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!

6) Alina has a six sided dice that she is rolling. What is the probability she will roll a number that is a factor of 6?



7) Find the missing angles: *\* new*



x =

y =

*\* new learning*

8) Find the mean, median, mode, and range of the following set of numbers: 9, 9, 12, 5, 4, 3, 2



*\* see resource sheet*

mean =

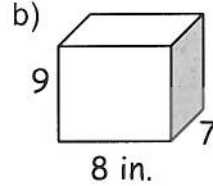
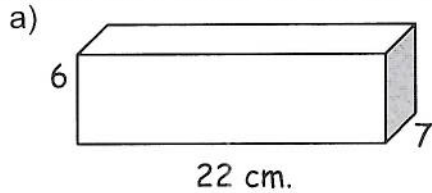
median =

mode =

range =



9) Find the volume of the figures:



V = \_\_\_\_\_

V = \_\_\_\_\_

10) Reduce each of the following fractions:

a)  $\frac{30}{35} = \frac{\quad}{\quad}$

b)  $\frac{20}{24} = \frac{\quad}{\quad}$

c)  $\frac{32}{64} = \frac{\quad}{\quad}$

d)  $\frac{7}{14} = \frac{\quad}{\quad}$

e)  $\frac{28}{35} = \frac{\quad}{\quad}$

f)  $\frac{40}{48} = \frac{\quad}{\quad}$

g)  $\frac{18}{42} = \frac{\quad}{\quad}$

h)  $\frac{9}{18} = \frac{\quad}{\quad}$

11) Find the number that corresponds with each of the following prime factorizations: *(Evaluate)*

a)  $2^2 \cdot 3$

b)  $3^2 \cdot 5$

c)  $5^2 \cdot 7$

d)  $7^2 \cdot 11$

# Show your work! Show your work! Show your work!



Show your work! Show your work! Show your work!

Name \_\_\_\_\_



## Summer Review - Week # 5



Complete each of the problems below. Please show all of your work.

1) Reduce each of the following fractions:

a)  $\frac{39}{42} = \underline{\hspace{1cm}}$

b)  $\frac{10}{18} = \underline{\hspace{1cm}}$

c)  $\frac{12}{40} = \underline{\hspace{1cm}}$

d)  $\frac{14}{56} = \underline{\hspace{1cm}}$

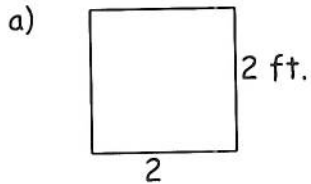
e)  $\frac{16}{24} = \underline{\hspace{1cm}}$

f)  $\frac{18}{54} = \underline{\hspace{1cm}}$

g)  $\frac{20}{75} = \underline{\hspace{1cm}}$

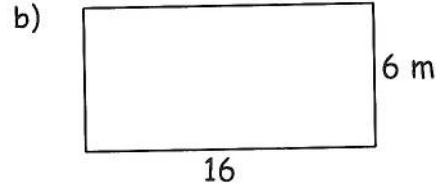
h)  $\frac{21}{28} = \underline{\hspace{1cm}}$

2) Find the perimeter and area of the figures:



P =

A =



P =

A =



3) Find the greatest common factor (GCF) of the following sets of numbers:

a) 12, 16

b) 18, 20

c) 35, 42

d) 50, 60



4) If  $M = 27$ , simplify each of the following:

a)  $M + 9$

b)  $M - 12$

c)  $32 - M$

d)  $2M$



5) Change the following fractions to mixed numbers:

a)  $\frac{7}{2} = \underline{\hspace{1cm}}$

b)  $\frac{8}{3} = \underline{\hspace{1cm}}$

c)  $\frac{9}{4} = \underline{\hspace{1cm}}$

d)  $\frac{10}{6} = \underline{\hspace{1cm}}$

e)  $\frac{11}{7} = \underline{\hspace{1cm}}$

f)  $\frac{12}{8} = \underline{\hspace{1cm}}$

g)  $\frac{13}{9} = \underline{\hspace{1cm}}$

h)  $\frac{14}{10} = \underline{\hspace{1cm}}$

Show your work! Show your work! Show your work!

Show your work! Show your work! Show your work!

6) Find the least common multiple (LCM) of the following sets of numbers:

a) 6, 7

b) 7, 12

c) 8, 16

d) 9, 12



7) Put the following fractions on the number line where they belong:  $\frac{3}{5}$ ,  $\frac{1}{8}$ ,  $\frac{2}{7}$



8) Find the prime factorization of each of the following numbers:

a) 35

b) 45

c) 55

d) 65

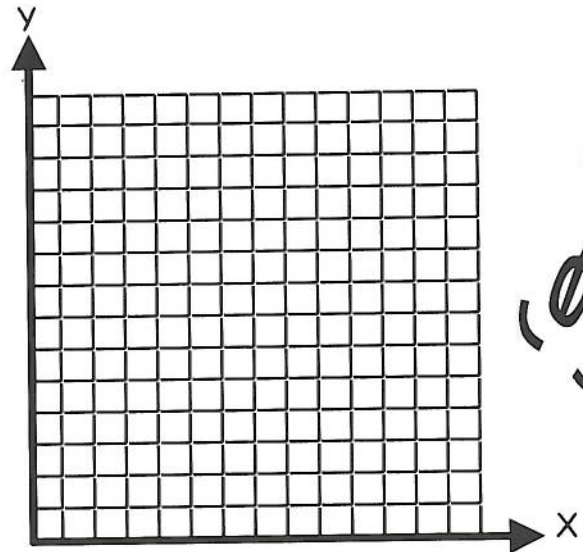
*Break down using exponents*



9) Graph each of the points.



X	Y
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7



10) Adam has decided to paint his house. What is the probability he will paint the South side of the house first?



11) Find the mean, median, mode, and range of the following set of numbers: 5, 7, 4, 9, 4, 1, 16, 17

mean =

median =

mode =

range =

Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!



Name \_\_\_\_\_

## Summer Review - Week # 6



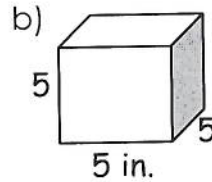
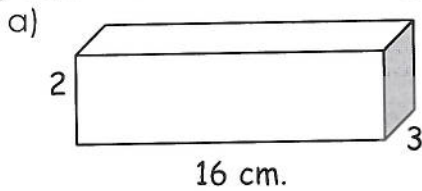
Complete each of the problems below. Please show all of your work.

1) Find the mean, median, mode, and range of the following set of numbers: 2, 2, 2, 5

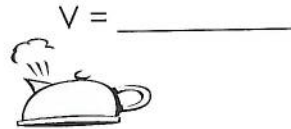
mean =                      median =  
mode =                      range =



2) Find the volume of the figures:



V = \_\_\_\_\_



3) Reduce each of the following fractions:

a)  $\frac{20}{25} = \frac{\quad}{\quad}$

b)  $\frac{21}{28} = \frac{\quad}{\quad}$

c)  $\frac{22}{88} = \frac{\quad}{\quad}$

d)  $\frac{23}{46} = \frac{\quad}{\quad}$

e)  $\frac{24}{30} = \frac{\quad}{\quad}$

f)  $\frac{25}{35} = \frac{\quad}{\quad}$

g)  $\frac{26}{39} = \frac{\quad}{\quad}$

h)  $\frac{27}{36} = \frac{\quad}{\quad}$

i)  $\frac{28}{40} = \frac{\quad}{\quad}$

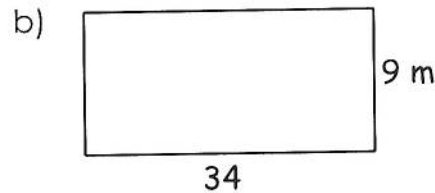
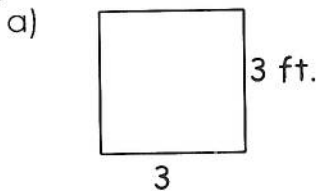
j)  $\frac{29}{58} = \frac{\quad}{\quad}$

k)  $\frac{30}{48} = \frac{\quad}{\quad}$

l)  $\frac{31}{62} = \frac{\quad}{\quad}$



4) Find the perimeter and area of the figures:



P =

P =

A =

A =



Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!

5) Change the following fractions to mixed numbers:



a)  $\frac{29}{3} = \text{---}$

b)  $\frac{28}{5} = \text{---}$

c)  $\frac{27}{6} = \text{---}$

d)  $\frac{26}{5} = \text{---}$



e)  $\frac{24}{5} = \text{---}$

f)  $\frac{23}{4} = \text{---}$

g)  $\frac{22}{3} = \text{---}$

h)  $\frac{21}{2} = \text{---}$

6) Find the least common multiple (LCM) of the following sets of numbers:

a) 5, 8

b) 6, 9

c) 7, 10

d) 8, 11

7) Put the following fractions on the number line where they belong:  $\frac{3}{7}, \frac{2}{7}, \frac{5}{7}$



8) Find the number that corresponds with each of the following prime factorizations:

a)  $2 \cdot 3^2$

b)  $3 \cdot 5^2$

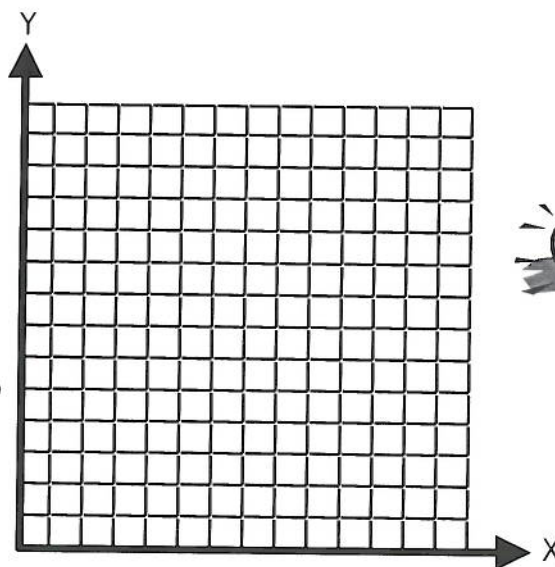
c)  $5 \cdot 7^2$

d)  $7 \cdot 11^2$

9) Graph each of the points.



X	Y
0	3
1	5
2	7
3	5
4	3
5	1
6	3
7	5



# Show your work! Show your work! Show your work!



# Show your work! Show your work! Show your work!



## Summer Review - Week # **7**

Name \_\_\_\_\_

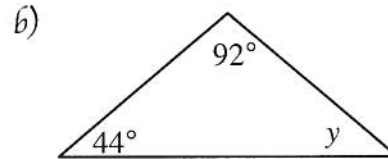
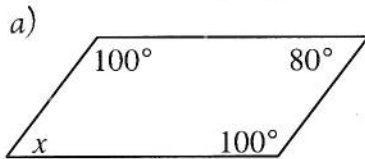


Complete each of the problems below. Please show all of your work.

1) Michael has to mow the lawn next week. What is the probability he will choose a day of the week that is spelled with a t?



2) Find the missing angles:



$x =$

$y =$

3) Find the mean, median, mode, and range of the following set of numbers: 3, 3, 3, 7, 1, 1, 1, 2, 9

mean =

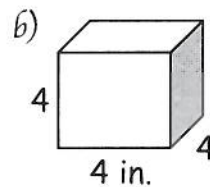
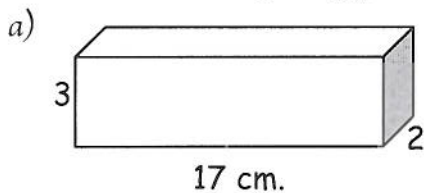
median =

mode =

range =



4) Find the volume of the figures:

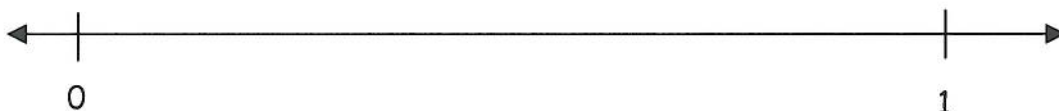


$V =$  \_\_\_\_\_

$V =$  \_\_\_\_\_



5) Put the following fractions on the number line where they belong:  $\frac{1}{5}$ ,  $\frac{3}{5}$ ,  $\frac{2}{5}$



# Show your work! Show your work! Show your work!

Show your work! Show your work! Show your work!



6) Reduce each of the following fractions:

a)  $\frac{8}{12} = \frac{\quad}{\quad}$

b)  $\frac{10}{65} = \frac{\quad}{\quad}$

c)  $\frac{16}{36} = \frac{\quad}{\quad}$

d)  $\frac{18}{45} = \frac{\quad}{\quad}$

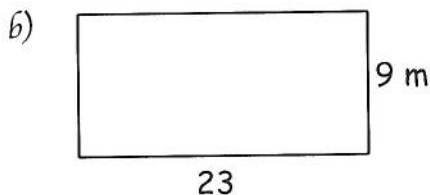
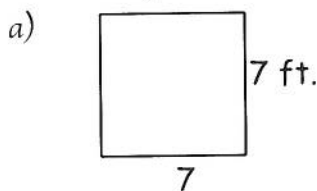
e)  $\frac{22}{77} = \frac{\quad}{\quad}$

f)  $\frac{24}{52} = \frac{\quad}{\quad}$

g)  $\frac{26}{34} = \frac{\quad}{\quad}$

h)  $\frac{28}{40} = \frac{\quad}{\quad}$

7) Find the perimeter and area of the figures:



P =

P =

A =

A =

8) Find the greatest common factor (GCF) of the following sets of numbers:

a) 40, 48

b) 30, 45

c) 32, 48

d) 36, 48

9) If  $M = 52$ , simplify each of the following:

a)  $M + 7$

b)  $M - 18$

c)  $74 - M$

d)  $2M$



10) Change the following fractions to mixed numbers:

a)  $\frac{38}{3} = \frac{\quad}{\quad}$

b)  $\frac{39}{4} = \frac{\quad}{\quad}$

c)  $\frac{41}{5} = \frac{\quad}{\quad}$

d)  $\frac{43}{6} = \frac{\quad}{\quad}$



Show your work! Show your work! Show your work!



# Show your work! Show your work! Show your work!

Name \_\_\_\_\_



## Summer Review - Week # 8



Complete each of the problems below. Please show all of your work.

- 1) Put the following fractions on the number line where they belong:  $\frac{10}{11}$ ,  $\frac{7}{11}$ ,  $\frac{1}{11}$



- 2) Find the prime factorization of each of the following numbers:

a) 16

b) 18

c) 20

d) 21

e) 22

f) 26

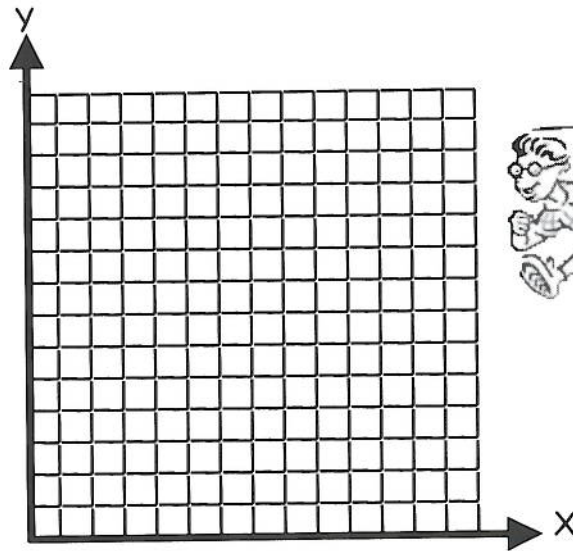
g) 28

h) 32

- 3) Graph each of the points.

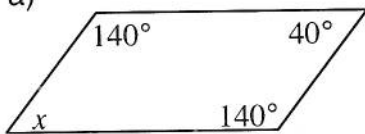


X	Y
0	4
1	5
2	6
3	7
4	8
5	7
6	1
7	2



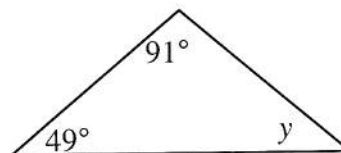
- 4) Find the missing angles:

a)



x =

b)



y =



Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!



5) Find the greatest common factor (GCF) of the following sets of numbers:

a) 50, 54

b) 64, 72

c) 82, 94

d) 102, 110



6) If  $M = 39$ , simplify each of the following:

a)  $M + 25$

b)  $M - 28$

c)  $71 - M$

d)  $3M$

7) Change the following fractions to mixed numbers:

a)  $\frac{87}{2} = \underline{\hspace{2cm}}$

b)  $\frac{88}{3} = \underline{\hspace{2cm}}$

c)  $\frac{89}{4} = \underline{\hspace{2cm}}$

d)  $\frac{90}{7} = \underline{\hspace{2cm}}$



e)  $\frac{91}{8} = \underline{\hspace{2cm}}$

f)  $\frac{92}{9} = \underline{\hspace{2cm}}$

g)  $\frac{93}{10} = \underline{\hspace{2cm}}$

h)  $\frac{94}{11} = \underline{\hspace{2cm}}$

8) Find the least common multiple (LCM) of the following sets of numbers:

a) 7, 12

b) 2, 9

c) 4, 8

d) 6, 14



9) Put the following fractions on the number line where they belong:  $\frac{3}{4}, \frac{1}{4}, \frac{2}{5}$



10) Find the number that corresponds with each of the following prime factorizations:

a)  $2^3 \cdot 3$

b)  $3^3 \cdot 5^2$

c)  $2^5 \cdot 7$

d)  $3^2 \cdot 7^2$

11) Ivan can either wear jeans, pants, or shorts to school. What is the probability he chooses either shorts or jeans?



# Show your work! Show your work! Show your work!




# Show your work! Show your work! Show your work!



## Summer Review - Week #

Name \_\_\_\_\_



Complete each of the problems below. Please show all of your work.

1) Fill in the table with the corresponding fractions, decimals, and percents:

	Fractions	Decimals	Percents
a)	$\frac{3}{4}$		%
b)	$\frac{7}{25}$		%
c)	$\frac{1}{10}$		%
d)	—	.24	%

	Fractions	Decimals	Percents
j)	—	.12	%
k)	—	.99	%
l)	—		90%
m)	—		14%

2) Change the following mixed numbers to improper fractions:

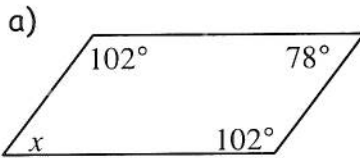
a)  $4\frac{2}{3} = \text{—}$

b)  $6\frac{3}{4} = \text{—}$

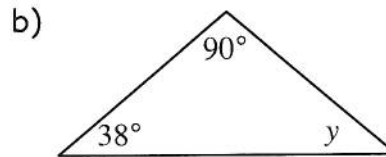
c)  $7\frac{4}{5} = \text{—}$

d)  $8\frac{5}{6} = \text{—}$

3) Find the missing angles:



x =



y =



4) Change the following fractions to mixed numbers:

a)  $\frac{31}{2} = \text{—}$

b)  $\frac{32}{3} = \text{—}$

c)  $\frac{33}{4} = \text{—}$

d)  $\frac{34}{5} = \text{—}$

e)  $\frac{35}{6} = \text{—}$

f)  $\frac{36}{7} = \text{—}$

g)  $\frac{37}{8} = \text{—}$

h)  $\frac{38}{9} = \text{—}$

5) If  $M = 79$ , simplify each of the following:

a)  $M + 34$

b)  $M - 58$

c)  $132 - M$

d)  $2M$

# Show your work! Show your work! Show your work!

# Show your work! Show your work! Show your work!

6) Reduce each of the following fractions:

a)  $\frac{60}{65} = \frac{\quad}{\quad}$

b)  $\frac{20}{55} = \frac{\quad}{\quad}$

c)  $\frac{75}{100} = \frac{\quad}{\quad}$

d)  $\frac{35}{100} = \frac{\quad}{\quad}$

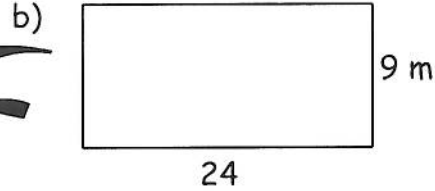
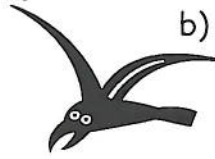
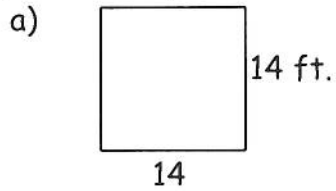
e)  $\frac{40}{100} = \frac{\quad}{\quad}$

f)  $\frac{15}{100} = \frac{\quad}{\quad}$

g)  $\frac{1000}{2000} = \frac{\quad}{\quad}$

h)  $\frac{30}{54} = \frac{\quad}{\quad}$

7) Find the perimeter and area of the figures:



P =

P =

A =

A =



8) Find the greatest common factor (GCF) of the following sets of numbers:

a) 72, 82

b) 34, 51

c) 42, 63

d) 46, 92

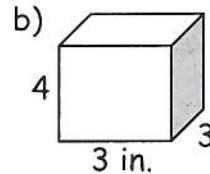
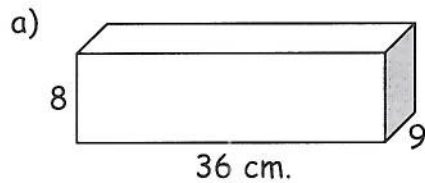
e) 15, 90

f) 28, 42

g) 9, 12

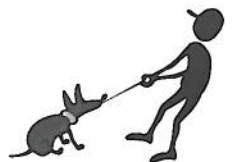
h) 15, 21

9) Find the volume of the figures:



V = \_\_\_\_\_

V = \_\_\_\_\_



# Show your work! Show your work! Show your work!

\* **Answer Key** \*

**Week #1**

- 1)  $\frac{2}{3}, \frac{2}{3}, \frac{2}{3}, \frac{2}{3}, \frac{6}{3}, \frac{1}{2}, \frac{4}{5}$     2) 32 ft, 64 ft<sup>2</sup>, 34 m, 60 m<sup>2</sup>    3) 1, 5, 2, 4    4) 16, 3, 5, 40
- 5)  $3\frac{3}{7}, 6\frac{1}{2}, 1\frac{4}{5}, 1\frac{2}{5}$     6) .16, 16%, .8, 80%,  $\frac{3}{10}, 30\%, \frac{21}{50}, 42\%, \frac{14}{25}, 56\%, \frac{17}{25}, .68, \frac{17}{20}, .85$
- 7)  $\frac{25}{8}, \frac{39}{7}, \frac{100}{11}, \frac{30}{7}$     8) graph    9)  $\frac{1}{3}$



**Week #2**

- 1) 70°, 42°    2) 7, 6.5, none, 3-12 or 9    3) 180 cm<sup>3</sup>, 336 cm<sup>3</sup>
- 4)  $\frac{1}{9}, \frac{1}{10}, \frac{1}{12}, \frac{1}{11}, \frac{1}{4}, \frac{4}{5}, \frac{1}{5}, \frac{1}{7}, \frac{1}{4}, \frac{2}{5}, \frac{2}{3}, \frac{2}{5}$     5) 36 ft, 81 ft<sup>2</sup>, 38 ft, 78 ft<sup>2</sup>    6) 9, 4, 2, 1
- 7) 61, 26, 37, 162    8)  $2\frac{7}{8}, 4\frac{2}{3}, 1\frac{8}{11}, 1\frac{1}{7}, 1\frac{8}{9}, 4\frac{3}{8}, 11\frac{2}{3}, 2\frac{1}{4}$     9) 30, 56, 60, 60
- 10) 8.57, 7, 5, 5-18 or 13

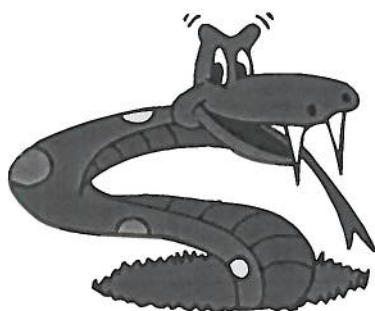


**Week #3**

- 1) number line    2)  $2 \cdot 3^2, 2^3 \cdot 3, 2 \cdot 19, 3^4$     3) graph    4)  $\frac{3}{7}$     5)  $\frac{2}{7}, \frac{8}{25}, \frac{9}{10}, \frac{4}{5}, \frac{7}{20}, \frac{2}{5}, \frac{12}{27}, \frac{3}{5}$
- 6) .25, 25%, .35, 35%, .7, 70%,  $\frac{31}{100}, 31\%, \frac{22}{25}, 88\%, \frac{11}{100}, 11\%, \frac{39}{50}, .78, \frac{11}{50}, .22$     7)  $\frac{7}{5}, \frac{23}{10}, \frac{41}{12}, \frac{47}{11}$
- 8) 102 cm<sup>3</sup>, 504 in<sup>3</sup>    9) 48 ft, 144 ft<sup>2</sup>, 46 m, 112 m<sup>2</sup>

**Week #4**

- 1)  $2\frac{7}{10}, 3\frac{1}{5}, 1\frac{8}{13}, 1\frac{1}{4}$     2) 36, 24, 36, 90    3) number line    4)  $5^2, 2^2 \cdot 3^2, 7^2, 2^6$     5) graph
- 6)  $\frac{2}{3}$     7) 60°, 91°    8) 6.29, 5, 9, 2-12 or 10    9) 924 cm<sup>3</sup>, 504 in<sup>3</sup>    10)  $\frac{6}{7}, \frac{5}{6}, \frac{1}{2}, \frac{1}{2}, \frac{4}{5}, \frac{5}{6}, \frac{3}{7}, \frac{1}{2}$
- 11) 12, 45, 175, 539



### Week #5

- 1)  $\frac{13}{14}, \frac{5}{9}, \frac{3}{10}, \frac{1}{4}, \frac{2}{3}, \frac{1}{3}, \frac{4}{15}, \frac{3}{4}$  2) 8 ft, 4 ft<sup>2</sup>, 44 m, 96 m<sup>2</sup> 3) 4, 2, 7, 10 4) 36, 15, 5, 54
- 5)  $3\frac{1}{2}, 2\frac{2}{3}, 2\frac{1}{4}, 1\frac{2}{3}, 1\frac{4}{7}, 1\frac{1}{2}, 1\frac{4}{9}, 1\frac{2}{5}$  6) 42, 84, 16, 36 7) number line 8) 5·7, 3<sup>2</sup>·5, 5·11, 5·13
- 9) graph 10)  $\frac{1}{4}$  11) 7.875, 6, 4, 1-17 or 16

### Week #6

- 1) 2.75, 2, 2, 2-5 or 3 2) 96 cm<sup>3</sup>, 125 in<sup>3</sup> 3)  $\frac{4}{5}, \frac{3}{4}, \frac{1}{4}, \frac{1}{2}, \frac{4}{5}, \frac{5}{7}, \frac{2}{3}, \frac{3}{4}, \frac{9}{10}, \frac{1}{2}, \frac{5}{8}, \frac{1}{2}$
- 4) 12 ft, 9 ft<sup>2</sup>, 86 m, 306 m<sup>2</sup> 5)  $9\frac{2}{3}, 5\frac{3}{8}, 4\frac{1}{2}, 5\frac{1}{5}, 4\frac{4}{5}, 5\frac{3}{4}, 7\frac{1}{3}, 10\frac{1}{2}$  6) 40, 18, 70, 88
- 7) number line 8) 18, 75, 245, 847 9) graph



### Week #7

- 1)  $\frac{3}{7}$  2) 80°, 44° 3) 3.33, 3, 1 and 3, 1-9 or 8 4) 102 cm<sup>3</sup>, 64 in<sup>3</sup> 5) number line
- 6)  $\frac{2}{3}, \frac{2}{13}, \frac{4}{9}, \frac{2}{5}, \frac{2}{7}, \frac{4}{9}, \frac{13}{17}, \frac{7}{10}$  7) 28 ft, 49 ft<sup>2</sup>, 64 m, 207 m<sup>2</sup> 8) 8, 15, 16, 12
- 9) 59, 34, 22, 104 10)  $12\frac{2}{3}, 9\frac{3}{4}, 8\frac{1}{5}, 7\frac{1}{6}$

### Week #8

- 1) number line 2) 2<sup>4</sup>, 2·3<sup>2</sup>, 2<sup>2</sup>·5, 3·7, 2·11, 2·13, 3·7, 2<sup>5</sup> 3) graph 4) 40°, 40° 5) 2, 8, 2, 2
- 6) 64, 11, 32, 117 7)  $43\frac{1}{2}, 29\frac{1}{3}, 22\frac{1}{4}, 12\frac{6}{7}, 11\frac{3}{8}, 10\frac{2}{9}, 9\frac{3}{10}, 8\frac{6}{11}$  8) 84, 18, 8, 42 9) number line
- 10) 24, 675, 224, 441 11)  $\frac{2}{3}$



### Week #9

- 1) .75, 75%, .28, 28%, .1, 10%,  $\frac{6}{25}, 24\%, \frac{3}{25}, 12\%, \frac{99}{100}, 99\%, \frac{9}{10}, .9, \frac{7}{50}, .14$  2)  $\frac{14}{3}, \frac{27}{4}, \frac{39}{5}, \frac{53}{6}$
- 3) 78°, 52° 4)  $15\frac{1}{2}, 10\frac{2}{3}, 8\frac{1}{4}, 6\frac{4}{5}, 5\frac{5}{6}, 5\frac{1}{7}, 4\frac{5}{8}, 4\frac{2}{9}$  5) 113, 21, 53, 158
- 6)  $\frac{12}{13}, \frac{4}{11}, \frac{3}{4}, \frac{7}{20}, \frac{2}{5}, \frac{3}{20}, \frac{1}{2}, \frac{5}{9}$  7) 56 ft, 196 ft<sup>2</sup>, 66 m, 216 m<sup>2</sup> 8) 2, 17, 21, 46, 15, 14, 3, 3
- 9) 2592 cm<sup>3</sup>, 36 in<sup>3</sup>