6th Grade Summer Packet

Each week this summer please complete one of the following review sheets. Please show as much work as you can for each problem. This will help if you are asked how you got the answer. Please check your answers with the answer sheet at the back of this packet.

These review sheets will be collected the first week of school and will help prepare you for 6th grade.

Have a great summer!

HOMEWORK PASS: You will receive a Math Homework Pass if you turn in any summer work!!

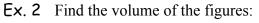
Formula Card:

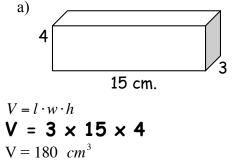
Rectangle - $A = l \cdot w$ P = l + l + w + w

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

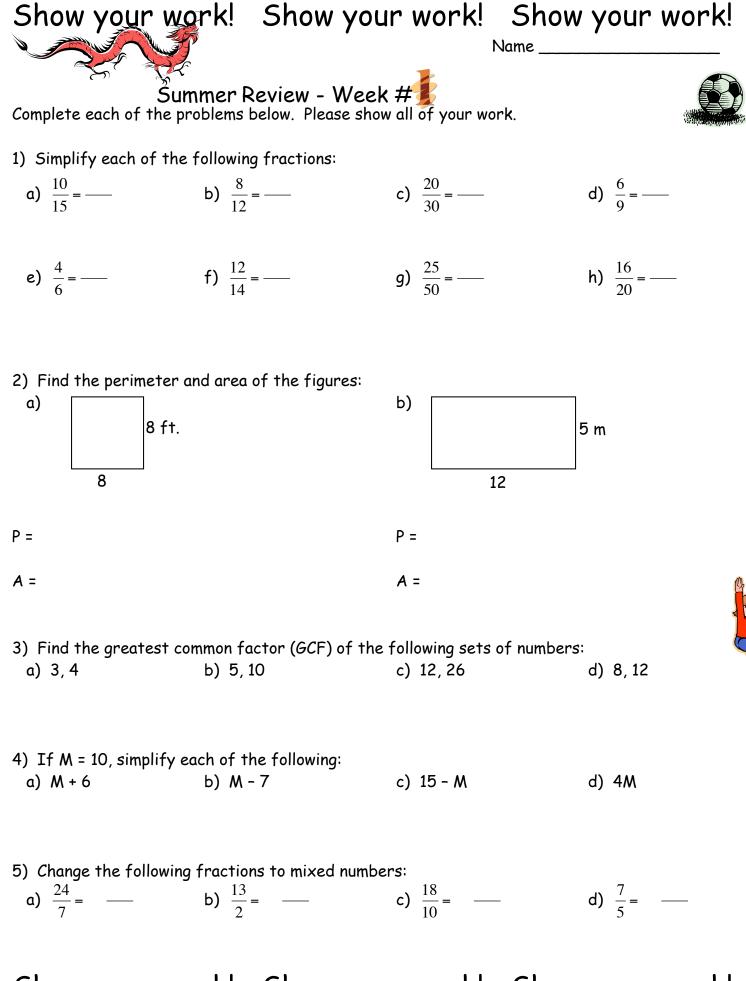
Examples of different problems and the work that should accompany the problems:

Ex. 1 If M = 5, simplify the following: M + 7





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



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

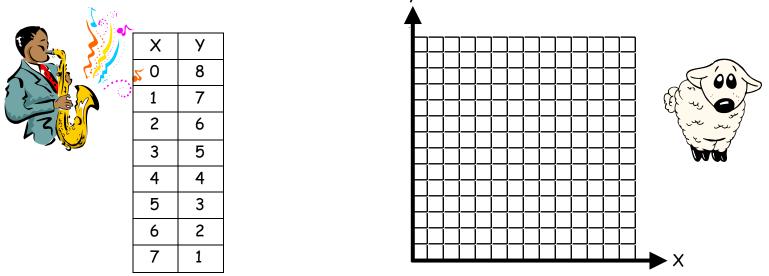
	Fractions	Decimals	Percents
a)	$\frac{1}{2}$.5	50%
b)	$\frac{4}{25}$		%
c)	$\frac{4}{5}$		%
d)		.3	%

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

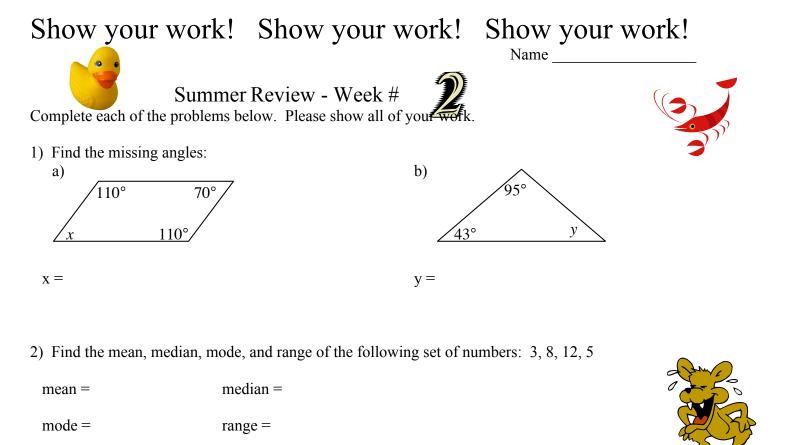
7) Change the following mixed numbers to improper fractions:

a) $3\frac{1}{8} =$ b) $5\frac{4}{7} =$ c) $9\frac{1}{11} =$ d) $4\frac{2}{7} =$
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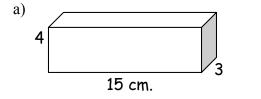
8) Graph each of the points.

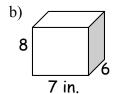


9) Maria has three red dresses, 2 white dresses, and one blue dress. What is the probability she will wear a blue dress at her party?



3) Find the volume of the figures:





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

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

4) Reduce each of the following fractions:

a) $\frac{3}{27} = --$ b) $\frac{4}{40} = ----$

 $\mathbf{V} =$

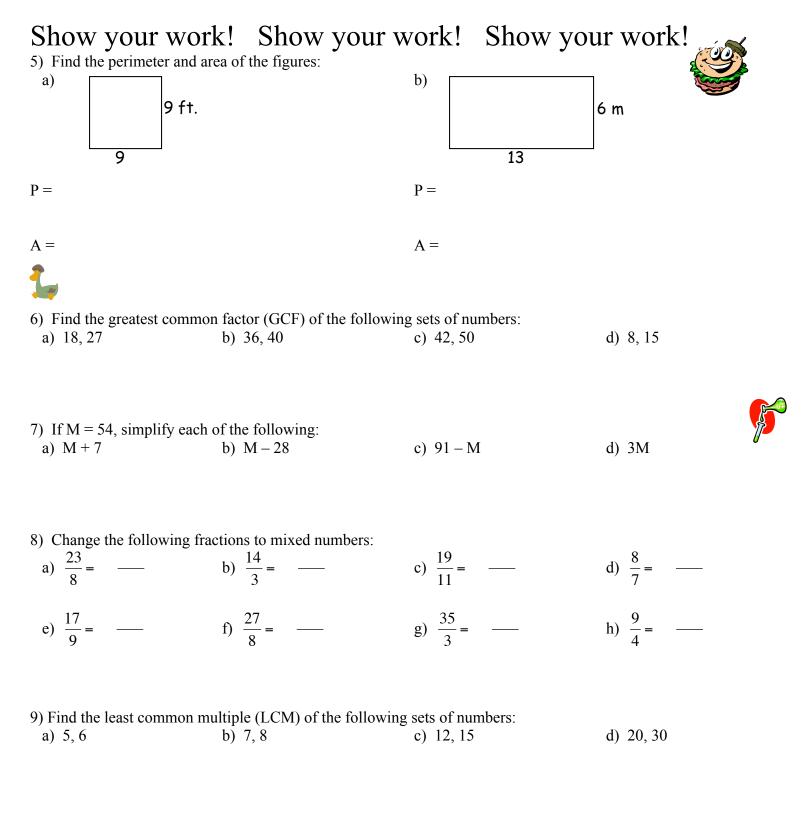


k) $\frac{12}{18} = --$ j) $\frac{14}{35} = --$ i) $\frac{9}{36} = ---$ 1) $\frac{22}{55} = ----$

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

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



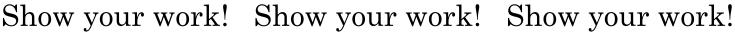


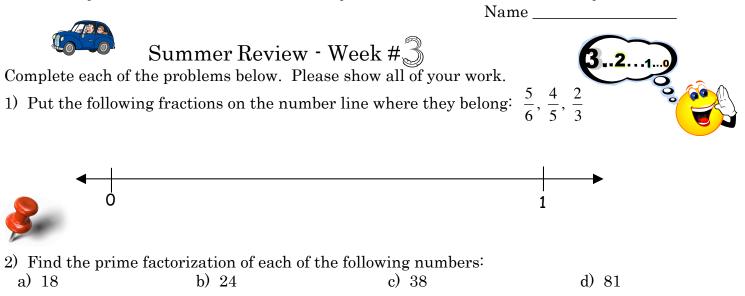
10) Find the mean, median, mode, and range of the following set of numbers: 5, 5, 7, 5, 9, 11, 18

mean = median =

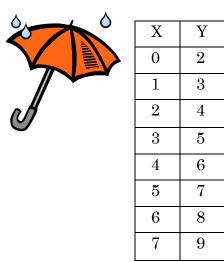
mode = range =

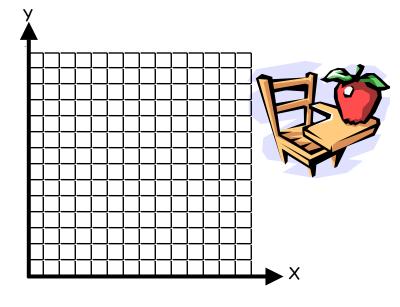






3) Graph each of the points.

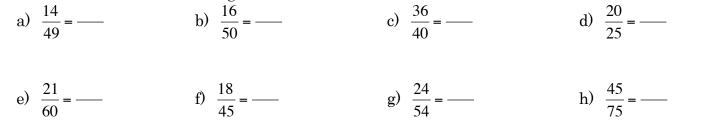




4) Frank is buying his first car and is stuck on what color it should be. He has to choose between three shades of green, two shades of blue or two shades of purple. What is the probability he will choose a green car?



5) Reduce each of the following fractions:



Show your work! Show your work! Show your work! 6) Fill in the table with the corresponding fractions, decimals, and percents:

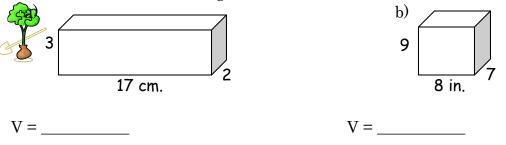
	Fractions	Decimals	Percents
a)	$\frac{1}{4}$		%
b)	$\frac{7}{20}$		%
c)	$\frac{35}{50}$		%
d)		.31	%

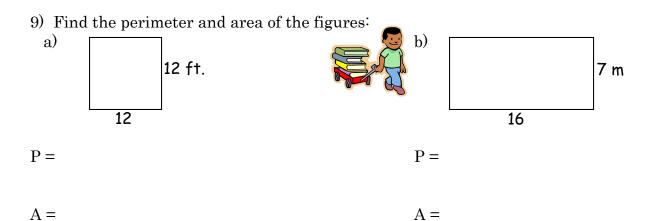
	Fractions	Decimals	Percents
j)		.88	%
k)		.11	%
1)			78%
m)			22%

7) Change the following mixed numbers to improper fractions:

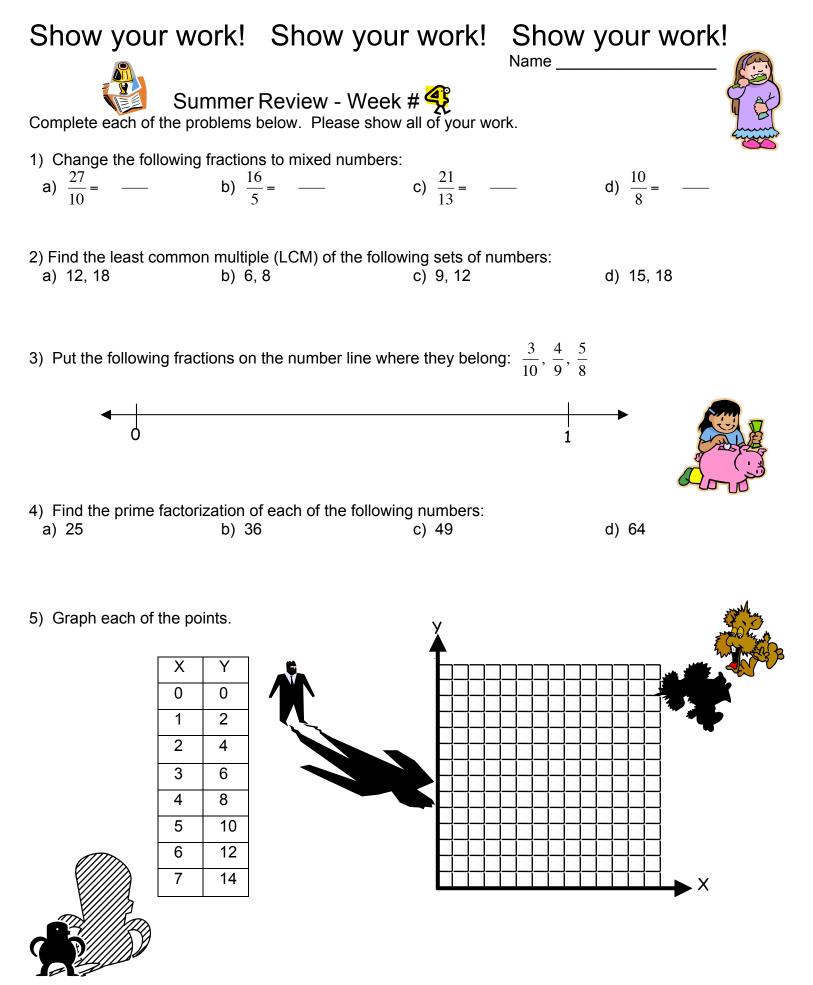
a) $1\frac{2}{5} = ---$ b) $2\frac{3}{10} = ---$ c) $3\frac{5}{12} = ---$ d) $4\frac{3}{11} = ---$

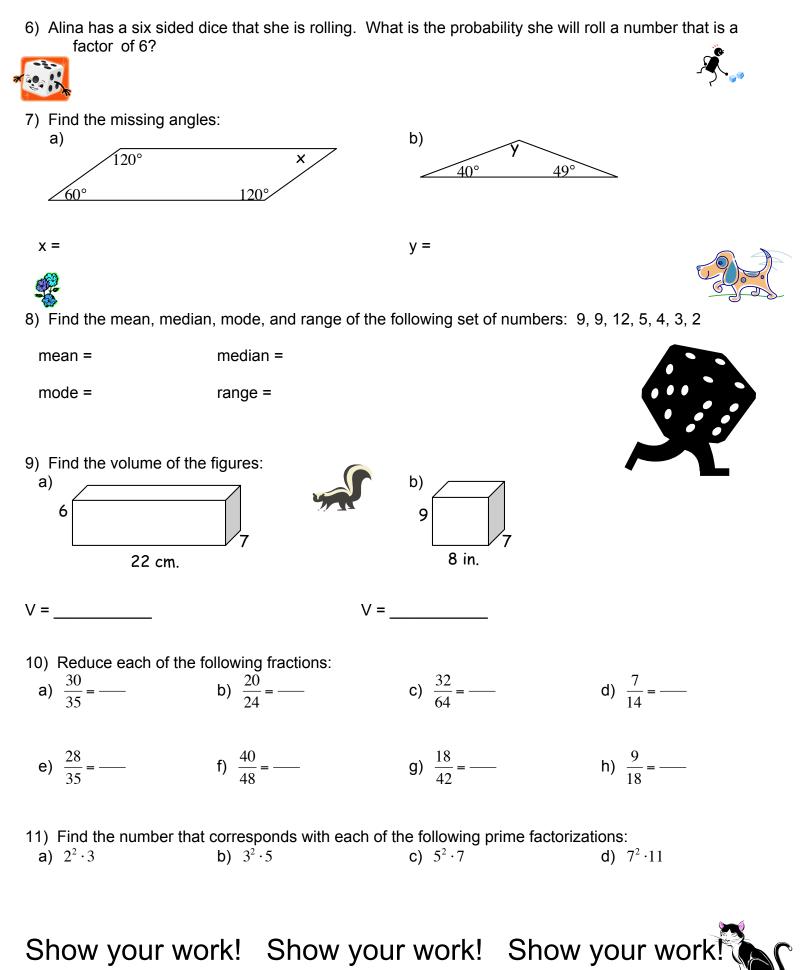
8) Find the volume of the figures:

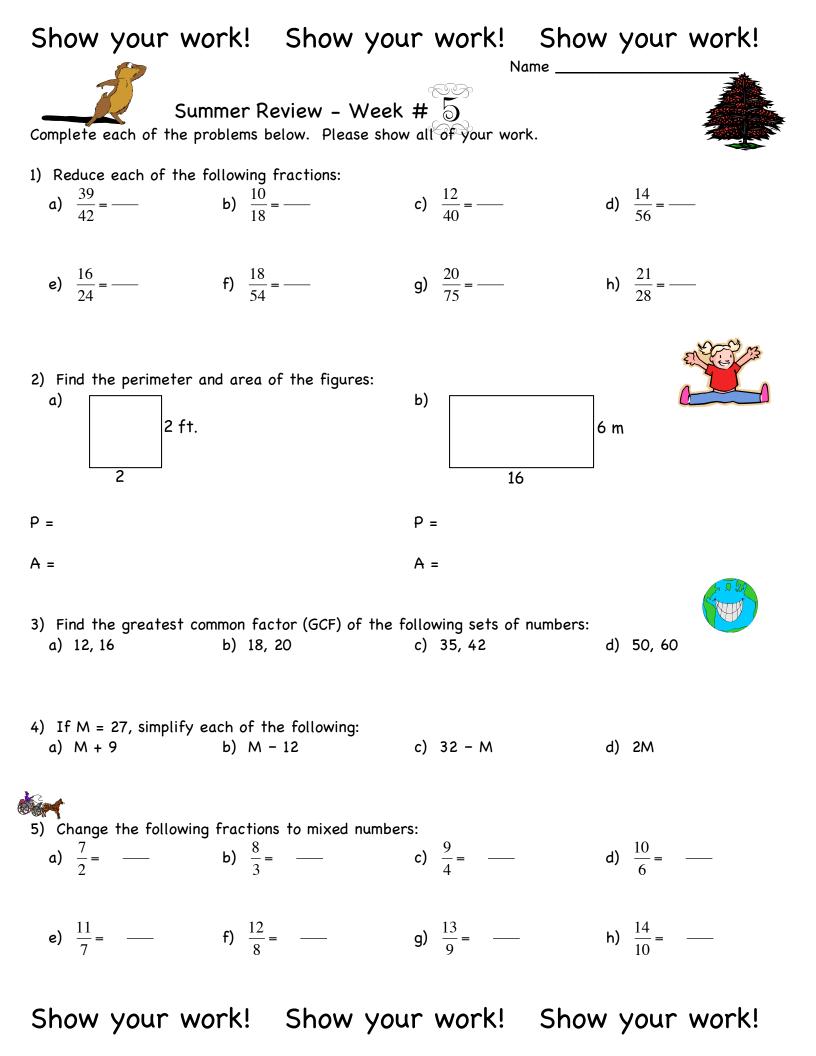


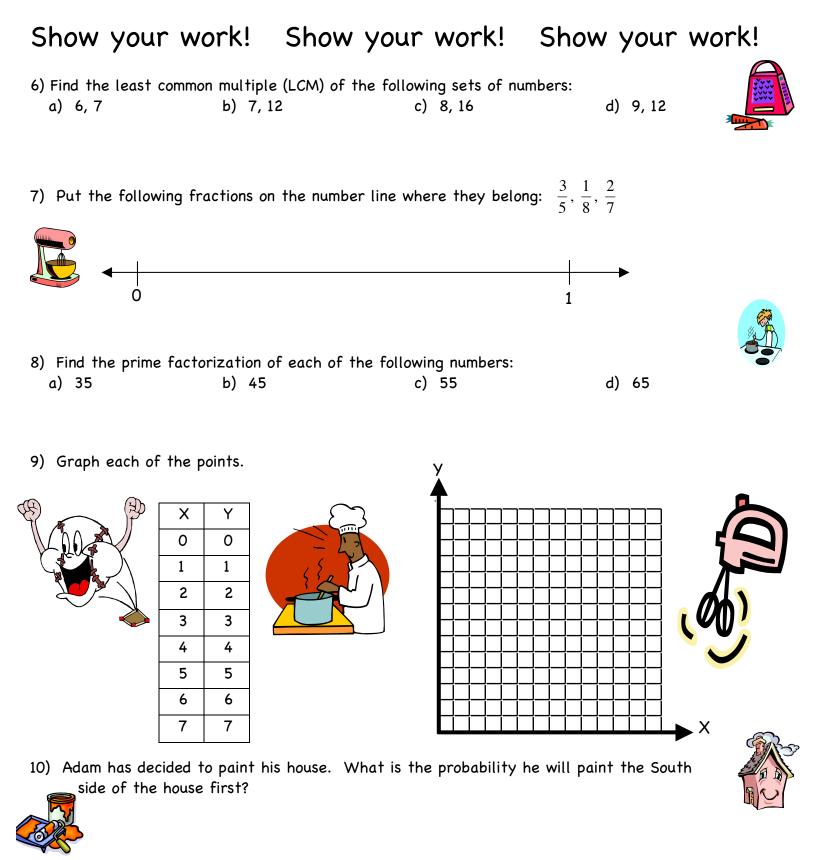








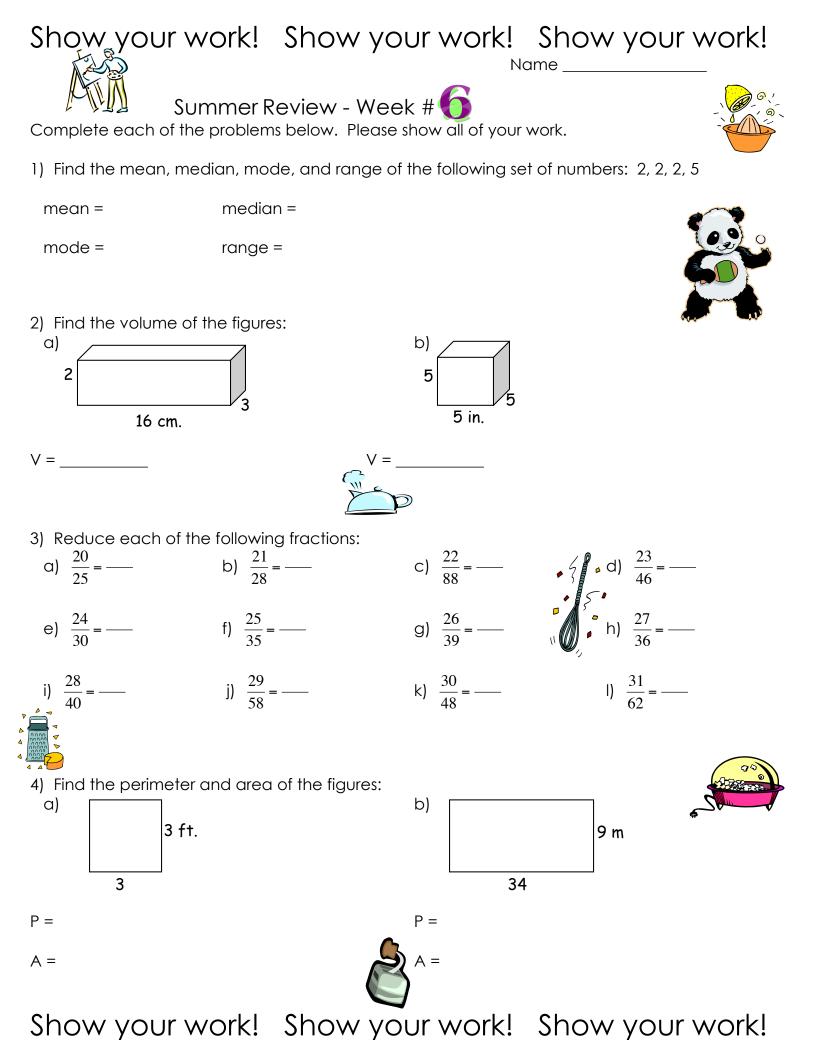


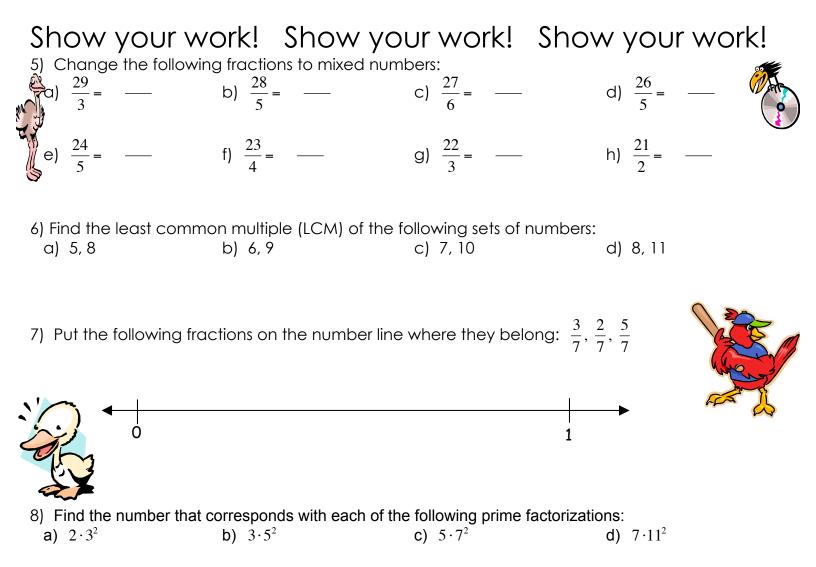


11) Find the mean, median, mode, and range of the following set of numbers: 5, 7, 4, 9, 4, 1, 16, 17

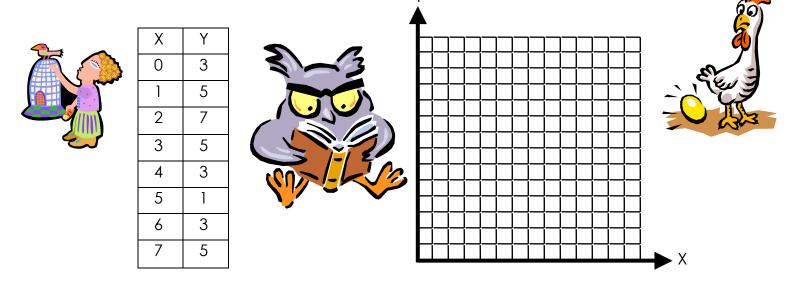
mean = median =

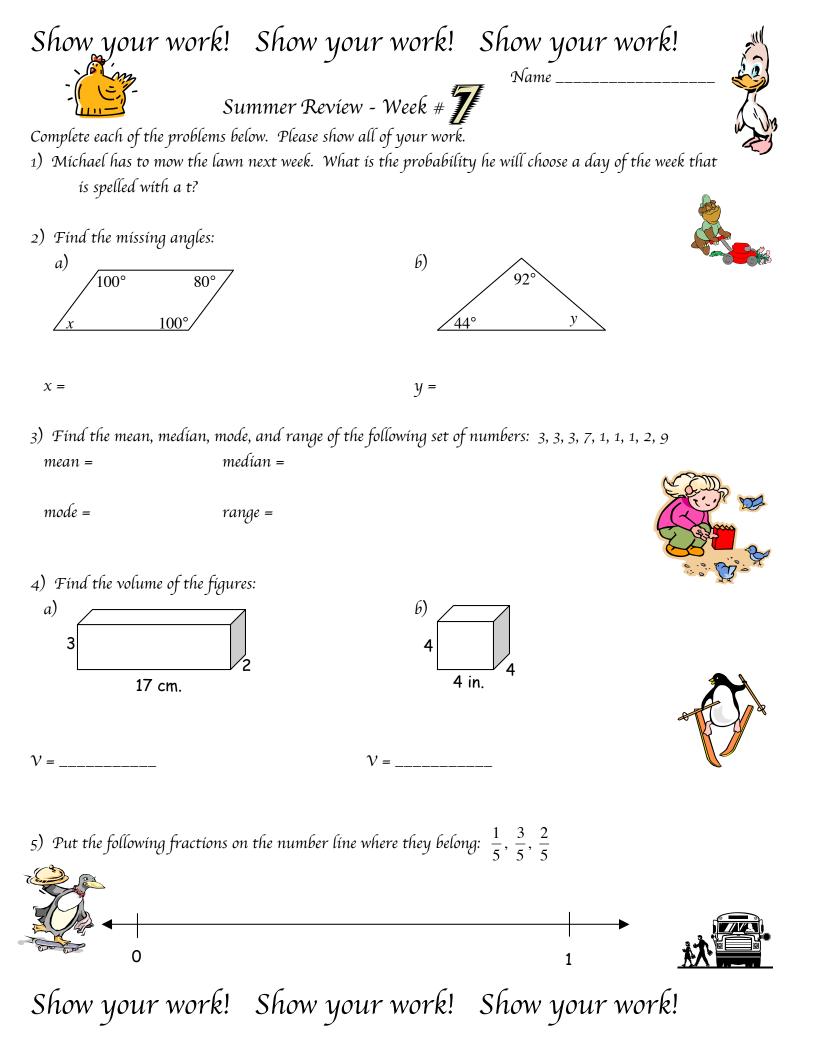
mode = range =

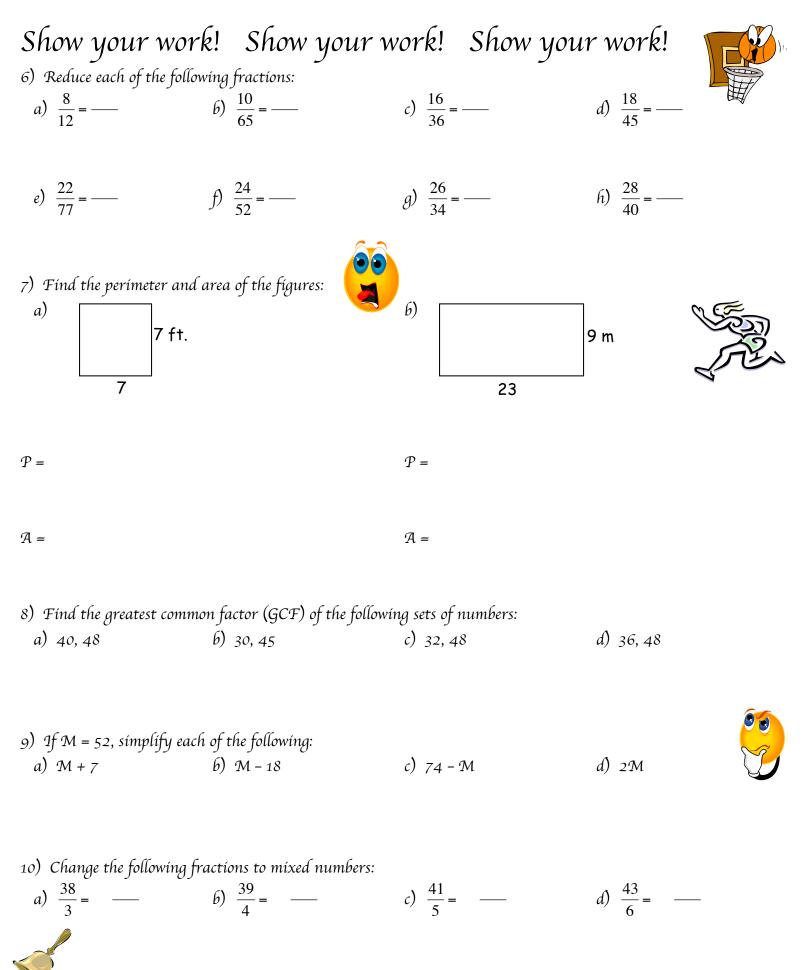


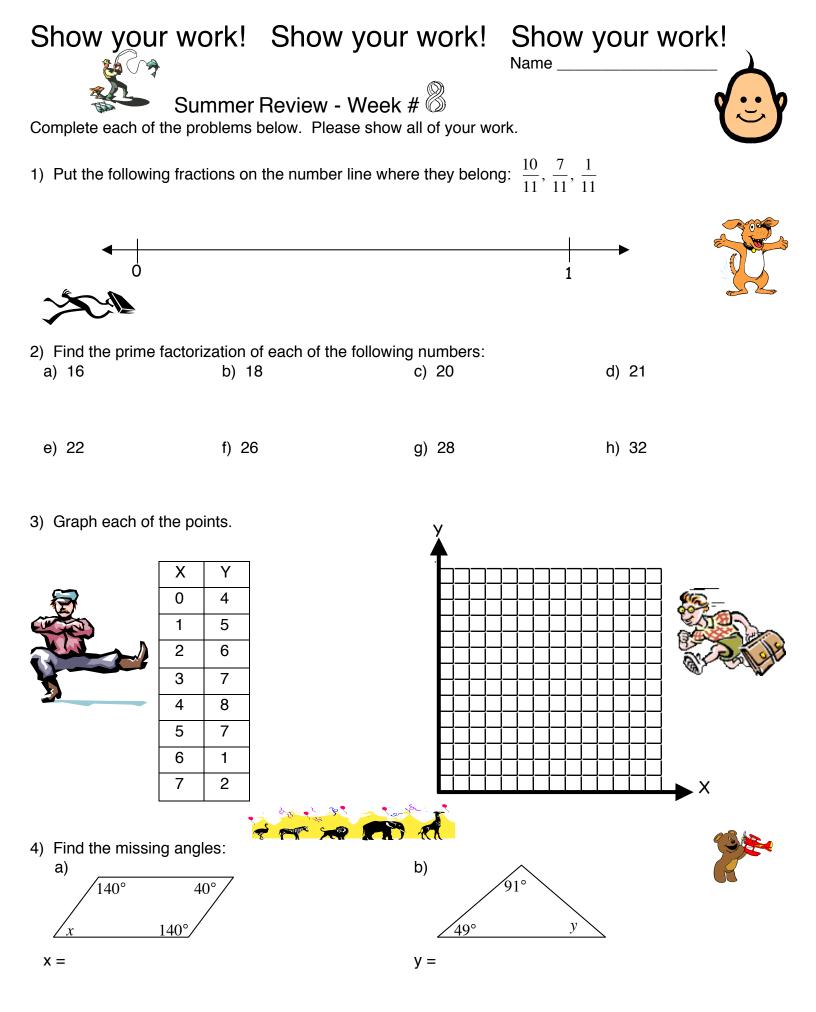


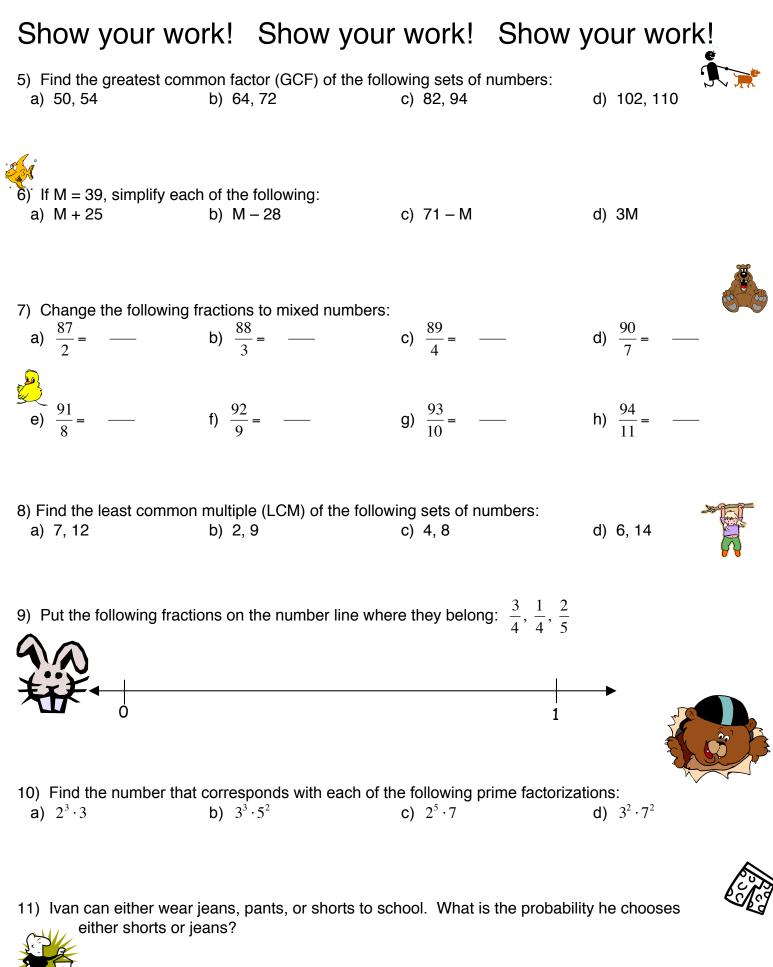
9) Graph each of the points.













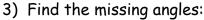
1) Fill in the table with the corresponding fractions, decimals, and percents:

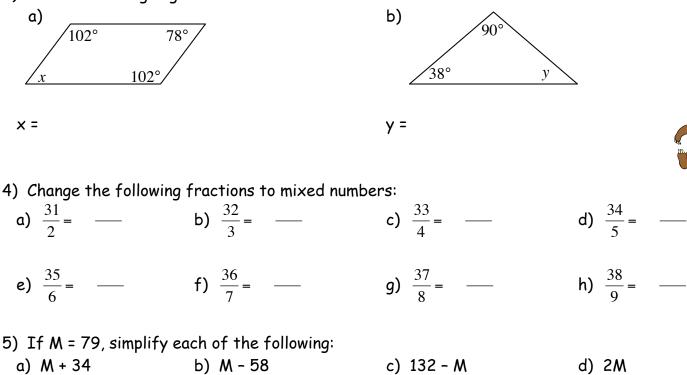
	Fractions	Decimals	Percents
a)	$\frac{3}{4}$		%
b)	$\frac{7}{25}$		%
c)	$\frac{1}{10}$		%
d)		.24	%

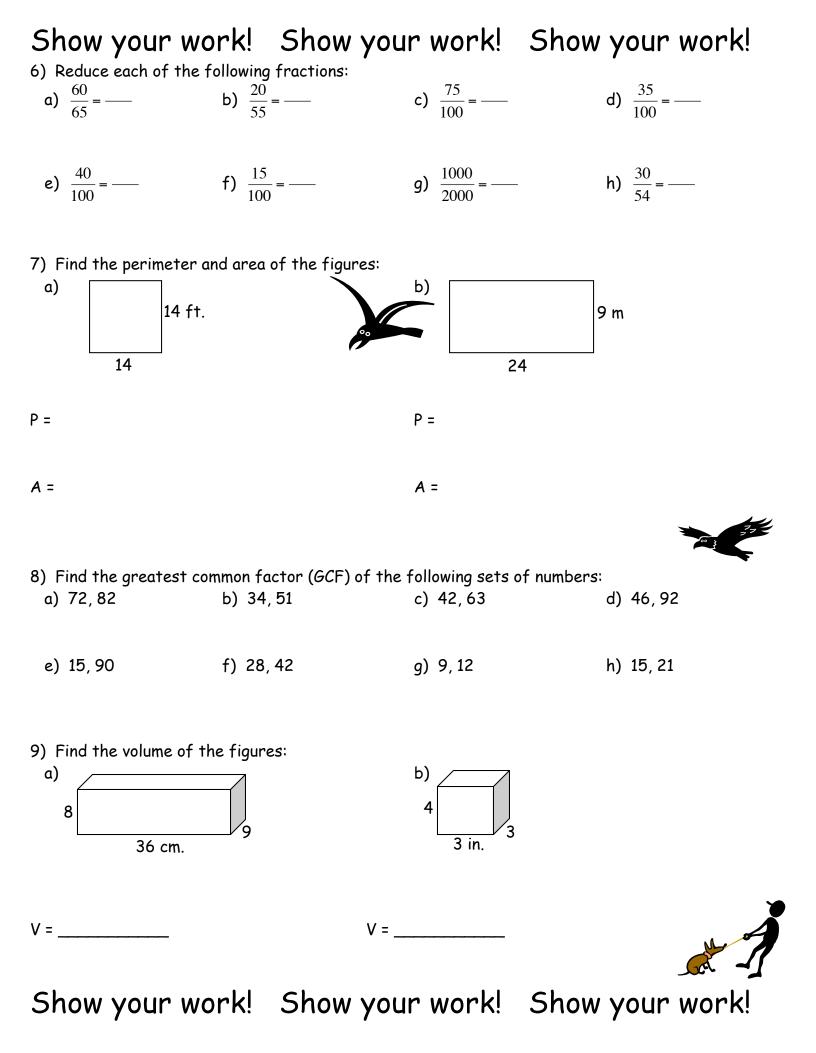
	Fractions	Decimals	Percents
j)		.12	%
k)		.99	%
I)			90%
m)			14%

2) Change the following mixed numbers to improper fractions:









Answer Key

Week #1 1) $\frac{2}{3}, \frac{2}{3}, \frac{2}{3$
3, 3, 3, 3, 3, 7, 2, 5
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^3 , 336 cm^3
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 ² , 38 ft, 78 ft ² 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
<u>Week #3</u>
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) $\frac{7}{5}$, $\frac{23}{10}$, $\frac{41}{12}$, $\frac{41}{12}$
8) 102 cm^3 , 504 in^3 9) 48 ft, 144 ft ² , 46 m, 112 m ²

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 cm³, 504 in³ 10) $\frac{6}{7}$, $\frac{5}{6}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{3}{7}$, $\frac{1}{2}$ 20 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, 4ft², 44 m, 96 m² 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) $5 \cdot 7$, $3^2 \cdot 5$, $5 \cdot 11$, $5 \cdot 13$ 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^3 , 125 in^2 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 ft², 86 m, 306 m² 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 cm³, 64 in³ 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 ft², 64 m, 207 m² 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)
 2^4 , $2 \cdot 3^2$, $2^2 \cdot 5$, $3 \cdot 7$, $2 \cdot 11$, $2 \cdot 13$, $3 \cdot 7$, 2^5 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)
 $\frac{2}{3}$

<u>Week #9</u>

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 ft², 66 m, 216 m² 8) 2, 17, 21, 46, 15, 14, 3, 3 9) 2592 cm³, 36 in³