Summer Assignment **Math Course 2**

RP—Ratios & Proportions

1. Solve each proportion using equivalent fractions:

$\frac{\square}{44} = \frac{1}{11}$ $\quad$ $\frac{24}{\square} = \frac{6}{7}$

$\frac{5}{6} = \frac{100}{\square}$ $\quad$ $\frac{4}{9} = \frac{\square}{81}$

2. Jenny made $120 for 8 hours of work. How much would Jenny make for 40 hours of work? Use a proportion to show your work in the space provided.

NS—The Number System

3. Solve each division problem (reduce if possible):

$\frac{4}{5} \div \frac{1}{2} =$

$\frac{1}{3} \div \frac{5}{6} =$

4. Shondra is making some cakes. She has $^3/_4$ cup of milk left in the carton. Each cake requires $^1/_8$ cup of milk. How many $^1/_8$ cups are in $^3/_4$ cup? Show your work in the space provided.

EE—Expressions & Equations

5. Rewrite each expression in exponential form. Then solve each expression.

4 x 4 x 4 = _____ = _____

5 x 5 x 5 x 5 = _____ = _____

3 x 3 = _____ = _____

1 x 1 x 1 x 1 x 1 x 1 x 1 = _____ = _____

6. Jerome had this problem on his math test:

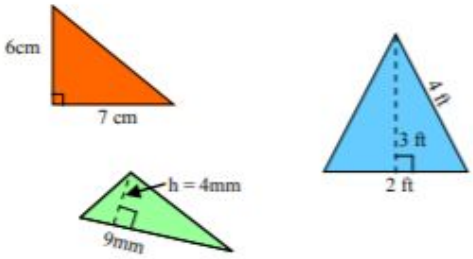
6^3

His answer was **18**.

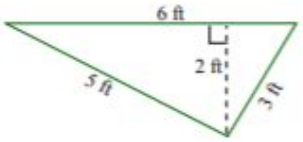
Did Jerome solve this problem correctly? If not, what should he have done differently?

G—Geometry

7. Find the area of each triangle:



8. Mickey wants to create a garden in his back yard. He has a triangular area shown below. How many *square feet* does Mickey have to plant his garden?



SP—Statistics & Probability

9. Find the ***median*** and ***range*** for the set of data:

55, 85, 63, 90, 64, 55, 63, 52, 55, 78, 90

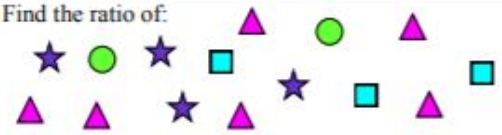
Median: _____

Range: _____

10. Josie thinks that because she has *two* pets, that the average number of pets each of her classmates has is also *two*. Is this a good statistical description of the number of pets each student has? What should she do instead?

RP—Ratios & Proportions

1. Find the ratio of:



stars to squares _____ triangles to circles _____

circles to total _____ squares to triangles _____

total to stars _____ circles to NOT circles _____

2. Sampson made a table to show how much yarn he would need to make some bracelets.

Number of bracelets	3	5	10	12	15
Yarn needed (in inches)	18	30	?	72	90

How much yarn does Sampson need to make **one** bracelet? _____

What number is missing from the table? _____

NS—The Number System

3. Divide using the standard algorithm.

$6\overline{)522}$ $12\overline{)1{,}140}$

4. Jameson bought movie tickets for himself and his friends and paid $105. If he bought 7 tickets, how much did each ticket cost? Use the space below to show your work.

EE—Expressions & Equations

5. Identify each variable.

$5 + r = 17$ $r =$ ___	$m \times 9 = 72$ $m =$ ___
$y + x = 20;\ x = 6$ $y =$ ___	$b - 15 = a;\ a = 17$ $b =$ ___

6. There are 5 more peach trees than apple trees on grandpa's farm. If there are 7 peach trees, how many apple trees are there?
Write an algebraic equation and solve. Use a to stand for the number of apple trees.

Equation: _____

$a =$ _____

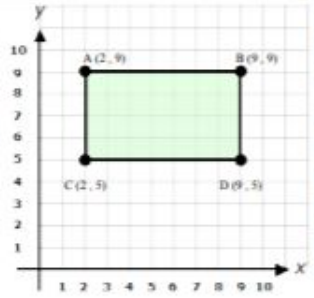
G—Geometry

7. How many units long is this rectangle?

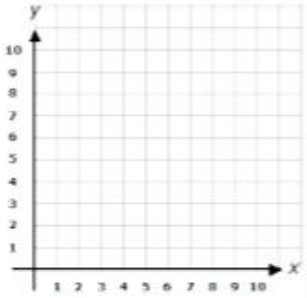
_____

How many units wide is this rectangle?

_____



8. Plot each of the points on the coordinate grid. After each point, draw a line to connect it to the previous point.
(3 , 3), (5 , 1), (9 , 5), (7 , 7) (3 , 3)

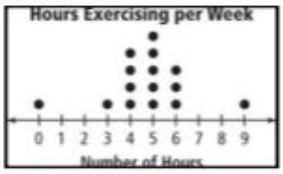


SP—Statistics & Probability

9. Label the dot plot with the following data:

51, 55, 48, 48, 55, 60, 53, 45, 48, 50, 51, 51, 53, 43

10. Lindsay made a dot plot of the amount of hours she exercised each week.



How many weeks did she exercise for 6 hours?

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