Name_____

PERENNIAL MATH
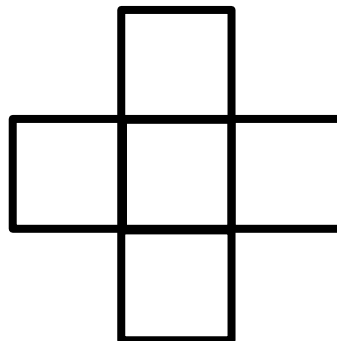## TEST #1
November 2015 Rookie Level

1) In a certain code, FIDDLE is written as 825569 and TONE is written as 6479. How is DEFINE written in that code?

2) The Dodgers are one of seven teams in their division. If they play all the other teams 17 games each, how many games do the Dodgers play for the season?

3) A rectangle has a perimeter of 60cm and its length is twice as long as its width. What is the area of this rectangle?

4) Paula took nine pieces of her candy out for herself and then evenly divided the rest among her seven friends. Each friend received thirteen pieces. How many pieces did she Paula start with?

5) How many rectangles of any size are in this shape?

6) Peyton has 20 red balls, and he has 9 fewer yellow balls than red balls. Peyton also has 2 more green balls than red balls. He also has 3 less blue balls than green balls. How many balls does Peyton have in all?

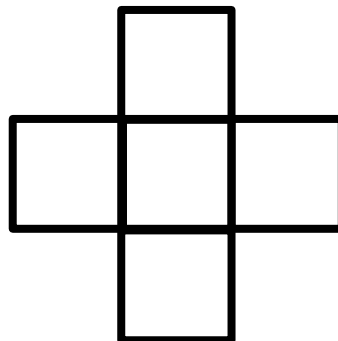|	
1) In a certain code, FIDDLE is written as 825569 and TONE is written as 6479. How is DEFINE written in that code?	**598279**
2) The Dodgers are one of seven teams in their division. If they play all the other teams 17 games each, how many games do the Dodgers play for the season?	**102**
3) A rectangle has a perimeter of 60cm and its length is twice as long as its width. What is the area of this rectangle?	**200cm²**
4) Paula took nine pieces of her candy out for herself and then evenly divided the rest among her seven friends. Each friend received thirteen pieces. How many pieces did she Paula start with?	**100**
5) How many rectangles of any size are in this shape?	**11**
6) Peyton has 20 red balls, and he has 9 fewer yellow balls than red balls. Peyton also has 2 more green balls than red balls. He also has 3 less blue balls than green balls. How many balls does Peyton have in all?	**72**

We are only providing some suggested solutions below . There are always multiple methods to solve problems.
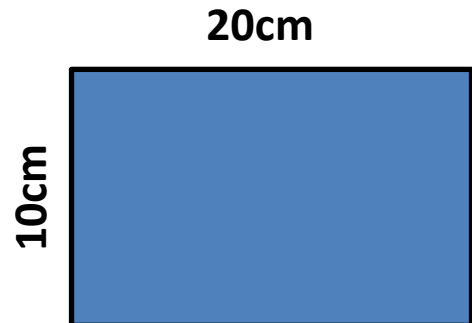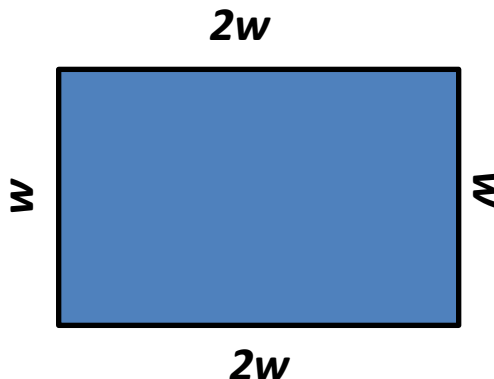
1) In a certain code, FIDDLE is written as 825569 and TONE is written as 6479. How is DEFINE written in that code? Use the numbers and translate DEFINE to 598279.

598279

2) Since the Dodgers are one of seven teams in their division and they play all the other teams 17 games each they would play 6 teams x 17 games = 102 games for the season.

102

3) Since the rectangle has a perimeter of 60cm and its length is twice as long as its width, we can use algebra to represent the width as *w* and the length is *2w*.   Therefore the perimeter can be written as follows, 2(*w* + *2w*) = 60. Divide both sides by 2 and (*w* + *2w*) = 30. Now you can divide both sides by 3, since *3w = 30*, and determine that *w = 10. The width is 10cm and the length is 20cm. The area of the rectangle is length x width, 20cm x 10cm = 200cm²*

2w

w | | w
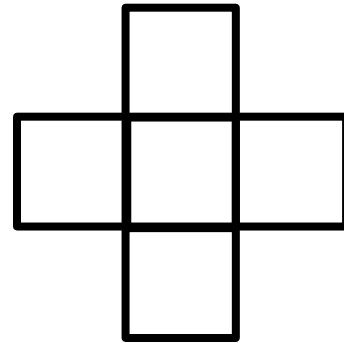
2w

20cm

10cm

200cm²

4) Paula took nine (9) pieces of her candy out for herself. Then evenly divided the rest among her seven friends who received thirteen pieces each which is 7 x 13 = 91. Add her 9 to her friends 91 and you have:
9 + 91 = 100

100

5) Make a chart to keep up with the type of rectangle and count each type going across first and then down. There are 11 rectangles.

Shapes made with:	Number of that type
1 shape	5
2 shapes	4
3 shapes	2
Total	11

11

6) Make a chart to determine how many of each type of ball and then add them up.

Color	Description	Formula	Total
Red	20 red balls	20	20
Yellow	9 fewer yellow than red balls	20 – 9	11
Green	2 more green than red balls	20 + 2	22
Blue	3 less blue than green balls	22 – 3	19
		TOTAL BALLS	**72**

72