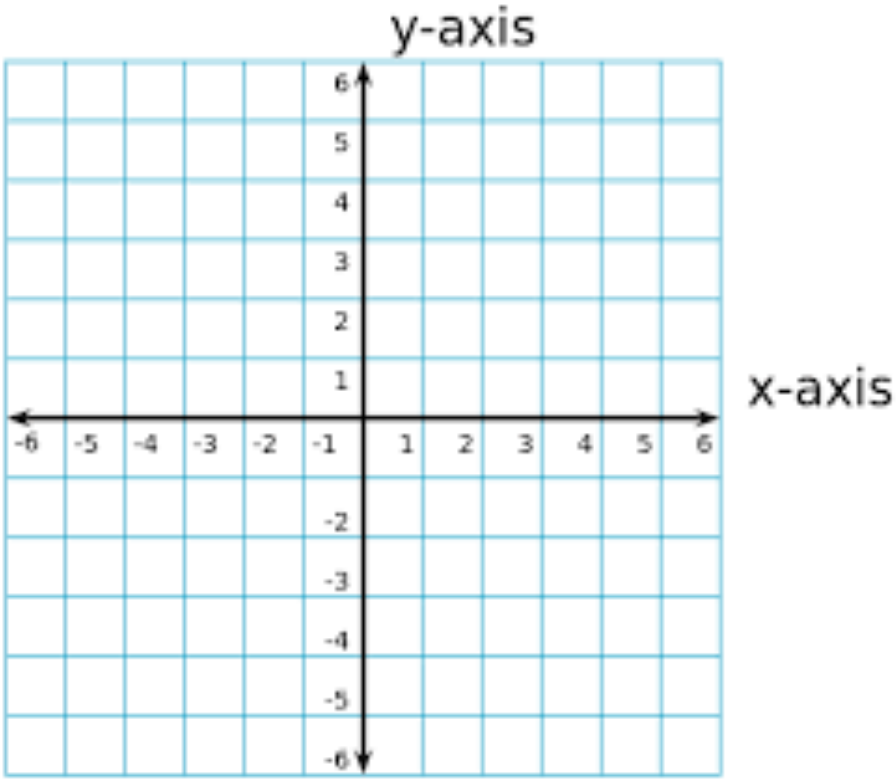
# Math 3. Homework 27

**1.** The vertices of five polygons are given below. For each polygon:
a) Plot the points in the coordinate plane and connect the points in the order that they are listed.
b) Color the shape the indicated color and identify the type of polygon it is.




1. The first polygon has these vertices: (−7,4) (−8,5) (−8,6) (−7,7) (−5,7) (−5,5) (−7,4). Plot all point, connect them and color this polygon GREY.
2. The second polygon has these vertices: (−2,−7) (−1,−4) (3,−1) (6,−7) (−2,−7). Plot all point, connect them and color this polygon ORANGE
3. The third polygon has these vertices: (0,−10) (0,−8) (7,−10) (0,−10). Plot all point, connect them and color this polygon BROWN.
4. The fourth polygon has these vertices: (−8,−5) (−8,−8) (−5,−8) (−5,−5) (−8,−5). Plot all point, connect them and color this polygon BLUE.
5. The fifth polygon has these vertices: (9,−1) (6,1) (6,−3) (9,−1). Plot all point, connect them and color this polygon PINK.

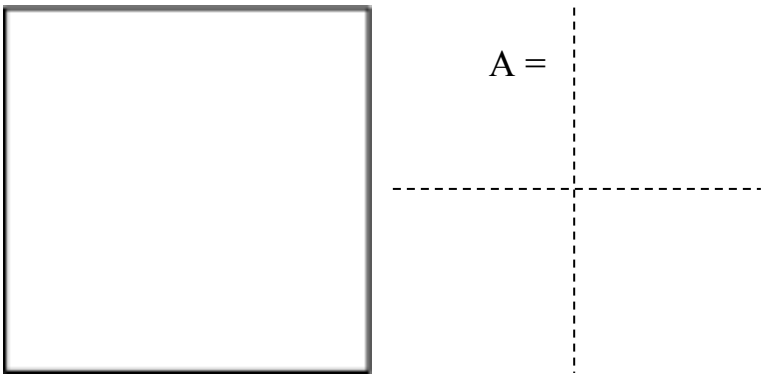
**Review - Simplifying fractions**

To simplify the fractions means to write down an equivalent fraction that has the smallest possible denominator.

**2.** Simplify the following fractions:

$\frac{5}{40} =$ $\frac{11}{44} =$ $\frac{12}{44} =$ $\frac{27}{27} =$ $\frac{14}{12} =$

**3.** A square origami paper is folded to form 4 equal smaller squares. Find the area of a smaller square if the side of an origami paper equals 16 cm. Do you think other 3 squares will have the same area or different?




**4.** The area of the rectangle with a side of 16cm (length) is equal the area of the square with a side of 8cm. Find another side of the rectangle (width).

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_____

**5.** Calculate and simplify the answer where possible:

$\frac{1}{2} + \frac{1}{3} =$ $\frac{1}{4} + \frac{3}{4} =$ $\frac{5}{9} + \frac{1}{3} =$ $\frac{2}{27} + \frac{7}{27} =$

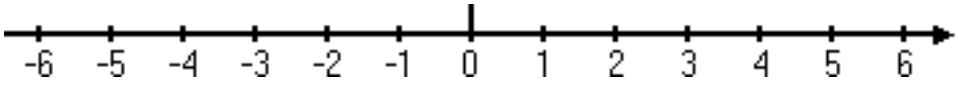
**6.** Rewrite these word sentences as number expressions and find a value of each expression. Use a number line, if necessary.

a) What number is 6 more than – 6? _____

b) What number is 2 less than – 4? _____

c) What number is double of number 3? _____

d) What number is half of number 4? _____




**7.** Long division.

2,976 ÷ 4 =

5,831 ÷ 7 =

**8.** Insert missing numbers. Use inverse operation:

15 + (5 ×…) = 65 25 + (5 ×…) = 55 150 – (5 ×…) = 140

15 + (5 ×…) = 130 25 + (5 ×…) = 70 150 – (5 ×…) = 100

**9.** Calculate using and optimal way (Hint: use commutative property of addition):

6 + 15 + 133 + 85 + 267 = _____

17 + 700 + 213 + 300 = _____

288 + 311 + 17 + 112 + 189 + 33 = _____