

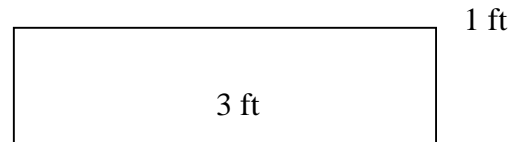
- 1) FILL IN THE BLANKS.  
DO NOT ROUND.

<15 points>

Recuded fraction	Percent	Decimal
$\frac{5}{16}$		
	$400\frac{1}{4}\%$	
		0.012

- 2) Find the area of the following rectangle in **inches**.  
Notice that the sides are labeled in feet! Include units with your area

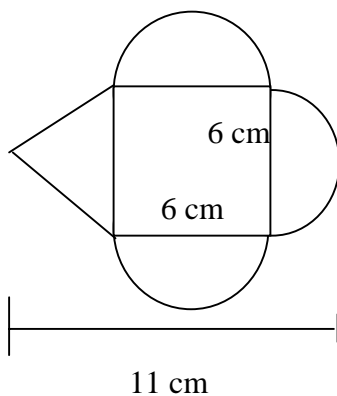
<5 pts>



3. Give an example of increasing a number by 20% and then decreasing your result by 20%.  
Show this doesn't yield the original number.

<6 pts>

4. Consider the following figure(the figure is not to scale): < 7 pts each>

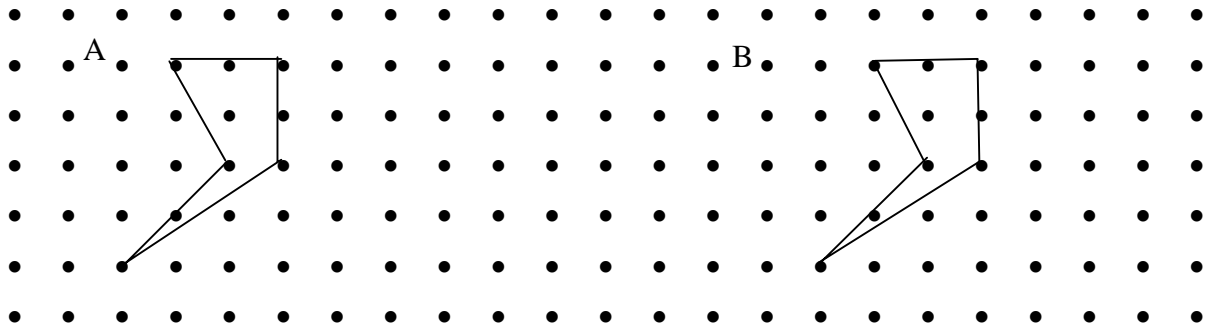


- a) Give the EXACT perimeter (include units) in simplified form. Assume that the triangle is isosceles.

- b) Give the area (include units) in simplified form.

5. Find the [A] area and [B] perimeter of the following. Show your work. For area, you must use either the additive or subtractive method (not Pick’s formula). Assume that the horizontal and vertical distance between each adjacent dot is 1 unit. Write answer in simplified form.

<7 pts each>



Area = \_\_\_\_\_

Perimeter = \_\_\_\_\_

6) Jose paid \$8 for  $\frac{3}{4}$  pound of chocolates. At this rate, what is the price of 5 pounds?

<6 pts>

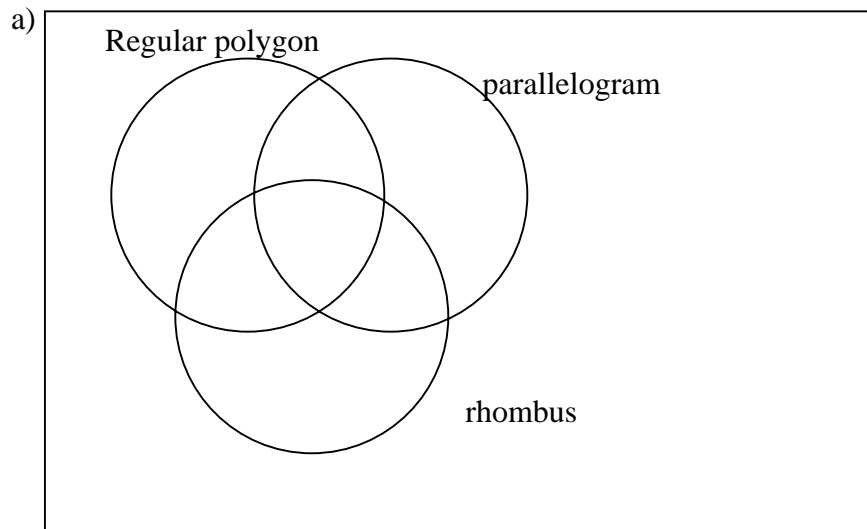
- a) Write a proportion which would be one way to find the solution to this problem.
- b) Solve. Include units with your answer. Round to the nearest cent.

7) Draw a quadrilateral with exactly 2 obtuse angles. Label the obtuse angles A and B.

<4 pts>

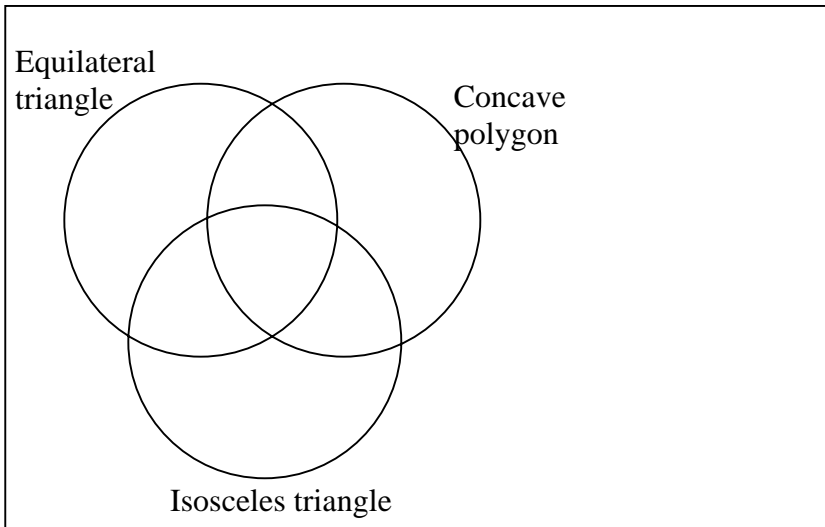
8) Draw one polygon in each region that it is possible to get a shape for. Label the sides with lengths. If it is impossible to find a shape for that region, hatch or shade that region.

Remember that outside the three circles is a region as well. <7 pts>



<7 pts>

b)



9) Use either the charged field or chip model to model the following problems. Do not change the order or the operation. Write an explanation to accompany your drawings.

<12 pts>

a)  $-2 - 4$

b)  $2(-3)$

10) Put in order from smallest to largest. **Put the letter in the blank that corresponds to the number.**

<10 pts>

$$A = 5.5, B = 5\%, C = 500\%, D = 5\frac{16}{37}, E = 6, F = \sqrt{35}, G = 3^2, H = \frac{36}{5}, I = 2\pi$$

\_\_\_\_\_ smallest \_\_\_\_\_ largest

11) Write in words, using the word “and” and not “point”: 1204.015

<5 pts>

12) For the following, do one line per step and circle your answer:  $\frac{2+6}{2-4} - 2^2 + 8 - 4 \div 2$

<6 pts>

13) Compute: DO NOT ROUND.

<6 pts each>

a)  $11.24 + .083$

b)  $6 - 2.7777$

c)  $2.7 \times 3.25$

14) Mark purchased a couch. The total bill after the 7% sales tax was added was \$914.85. What was the cost of the couch without the tax? Fill in the blanks (let x be your unknown) and then solve, showing all your steps clearly and including units with your answer.

<6 pts>

\_\_\_\_\_ % of \_\_\_\_\_ is \_\_\_\_\_

15) Convert

<4 pts each>

a) 12 km to cm

b) 1.8 mm to m

16) Draw two rectangles that are not congruent, but

<5 pts each>

a) are similar. Label their sides with lengths.

Do not worry about drawing them to scale.

b) have the same perimeter. Label their sides with lengths.

Do not worry about drawing them to scale, just label the sides.

c) Have the same area. Label their sides with lengths.

Again, do not worry about drawing them to scale, just label!

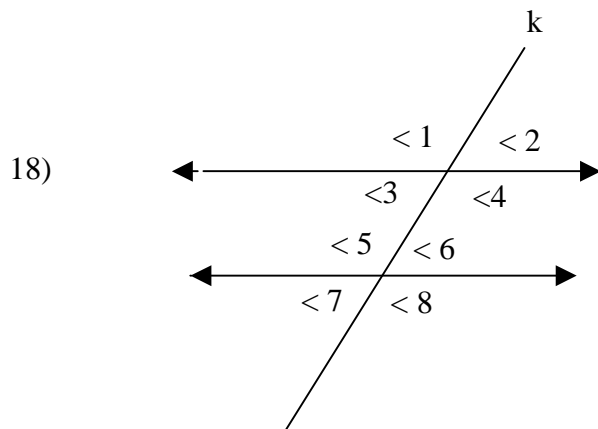
17) Give an example of each of the following and state **WHY** it fits (i.e. define)

<4 pts each>

a) Rational number.

b) an irrational number

c) an integer



<15 pts>

Use the following drawing to answer the following:

- List a pair of alternating interior angles
- What is the line  $k$  called?
- List any angles which have the same measure as  $\angle 3$
- Name 2 pairs of supplementary angles
- Name 2 obtuse angles

18) Draw a ray with 2 points A and B on it and use the proper notation to write the name of this ray.

<3 pts>

19) Give a pair of complementary angles in degrees.

<4 pts>

20) Use your number sense (or pictures) to find the following. Explain your approach or make sure it is clear with your work.

<4 pts each>

a) What is 125% of 20?

b) What is 75% of 16?