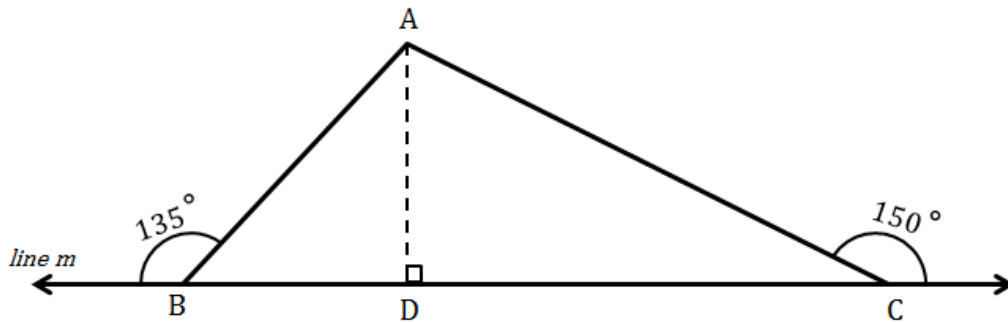


- 1) In the figure below, points B, C, and D lie on *line m*.



What is $m\angle CBA$?

What is $m\angle BCA$?

What is $m\angle BAC$?

What is $m\angle DAC$?

How would you classify this **pair** of angles? $\angle DAC$ and $\angle DCA$

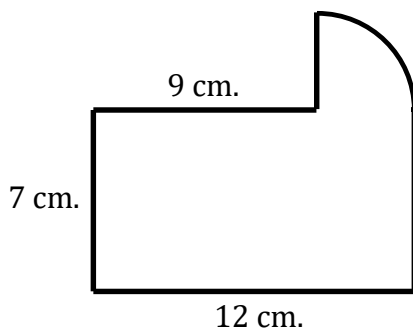
How would you classify this **pair** of angles? $\angle BDA$ and $\angle CDA$

- 2) Convert the rational numbers below from fraction form to standard (decimal) form. Use bar notation to represent repeating decimals.

$$\frac{2}{3}$$

$$\frac{7}{9}$$

- 3) Find the exact area of the figure below.



4) Draw examples of each of the following below:

a) adjacent angles

b) vertical angles

c) complementary angles

d) supplementary angles

e) a reflex angle

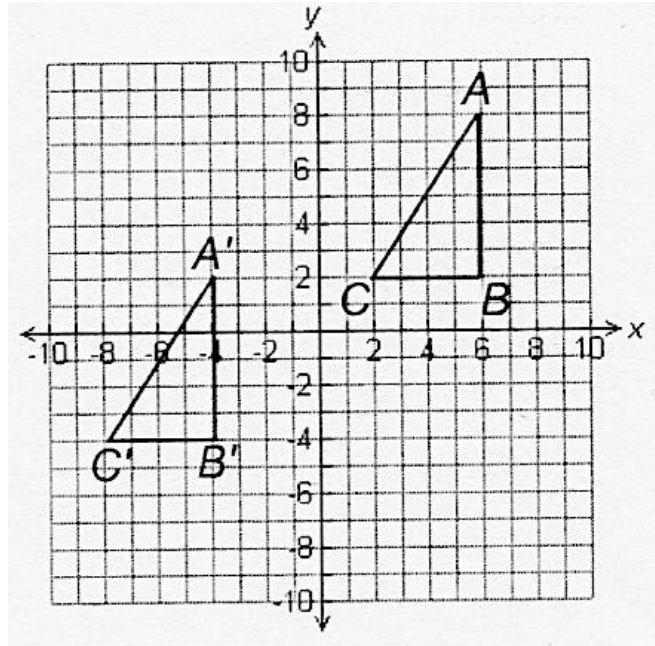
f) an acute angle

5) Describe the transformation of $\triangle ABC$ that resulted in its image $\triangle A'B'C'$.

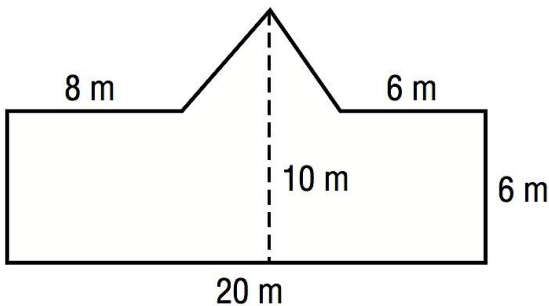
If you reflect $\triangle ABC$ across the x-axis, what will be the coordinates of the reflected triangle $\triangle A''B''C''$?

$A''(\quad , \quad), B''(\quad , \quad), C''(\quad , \quad)$

What do you call the point located at the intersection of the x and y axes?

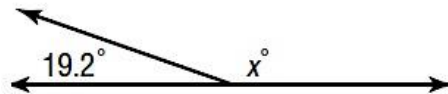
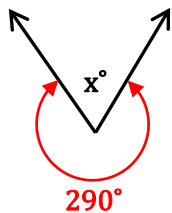
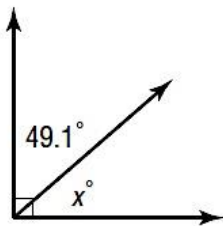


6) Calculate the area of the figure. Write your formulas and show your units for your final solution please.

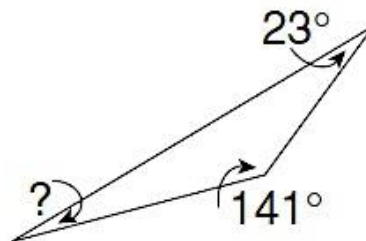
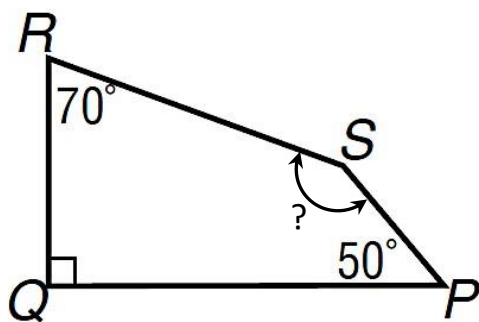


Formulas: Triangle Area = $\frac{1}{2}bh$ Parallelogram Area = bh Trapezoid area = $\frac{1}{2}(b_1+b_2)h$
 Circumference = πd Circle Area = πr^2 $\pi \approx 3.14$ for rough estimates: $\pi \approx 3$

7) Find the value of x in each of the figures below.



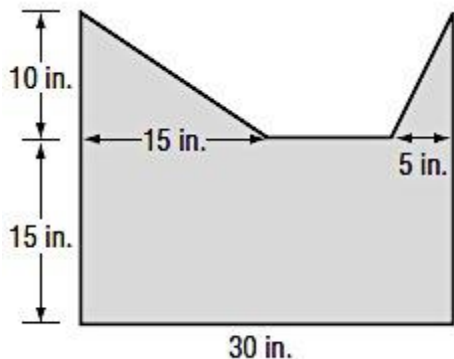
8) Find the unknown angle measurement in each of the polygons pictured below. What is the most specific name for each polygon?



9) Draw all lines of symmetry for each picture below.

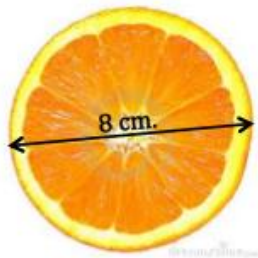


10) Calculate the shaded area below.

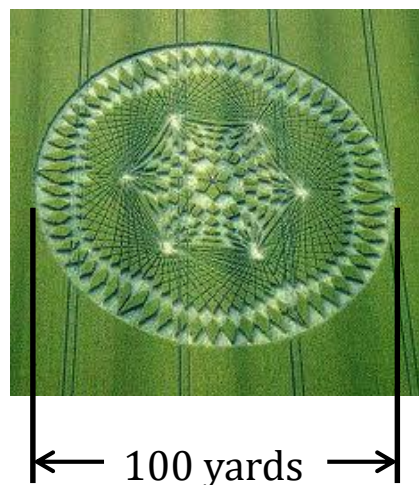


Formulas: Triangle Area = $\frac{1}{2}bh$ Parallelogram Area = bh Trapezoid area = $\frac{1}{2}(b_1+b_2)h$
 Circumference = πd Circle Area = πr^2 $\pi \approx 3.14$ for rough estimates: $\pi \approx 3$

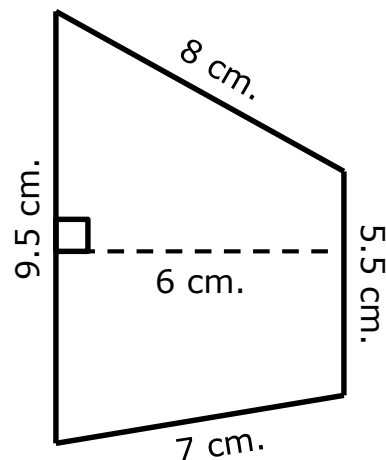
11) Using $\pi \approx 3.14$, find the area of each of the circles pictured below.



12) A crop circle is pictured below. Estimate the circumference. What is the exact area of the crop circle?



13) What is the most specific name for this polygon? Find its perimeter and area.



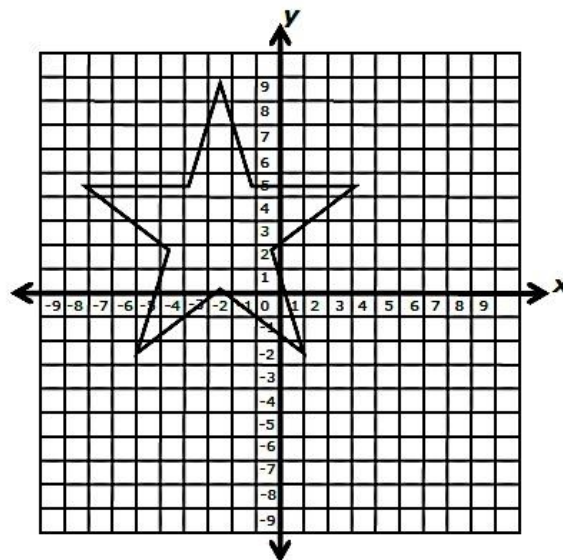
Formulas: Triangle Area = $\frac{1}{2}bh$ Parallelogram Area = bh Trapezoid area = $\frac{1}{2}(b_1+b_2)h$
Circumference = πd Circle Area = πr^2 $\pi \approx 3.14$ for rough estimates: $\pi \approx 3$

14) Which of the following coordinates lie outside the star graphed below?

- A. (0, 4)
- B. (-6, 4)
- C. (-3, 3)
- D. (4, 0)

Most of the star is located in which quadrant?

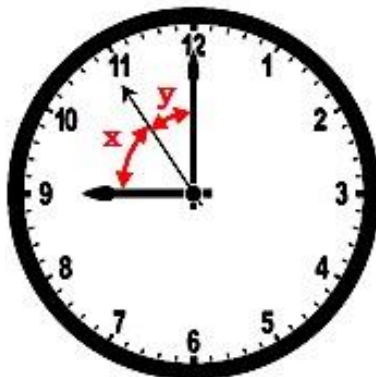
I, II, III or IV



15) Sophia attached a string of beads along the circular bottom edge of the lampshade shown below. She used about 51 centimeters of beads. Calculate a rough estimate of the diameter of the lamp shade (use $\pi \approx 3$).



16) Estimate x and y . What is the **most specific** name for this pair of angles?



Formulas: Triangle Area = $\frac{1}{2}bh$ Parallelogram Area = bh Trapezoid area = $\frac{1}{2}(b_1+b_2)h$
Circumference = πd Circle Area = πr^2 $\pi \approx 3.14$ for rough estimates: $\pi \approx 3$