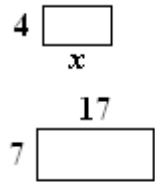


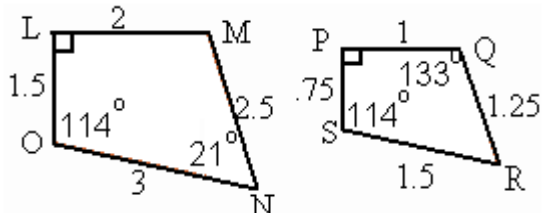
# CP Geometry – Unit 5 Jeopardy

## Similar Polygons

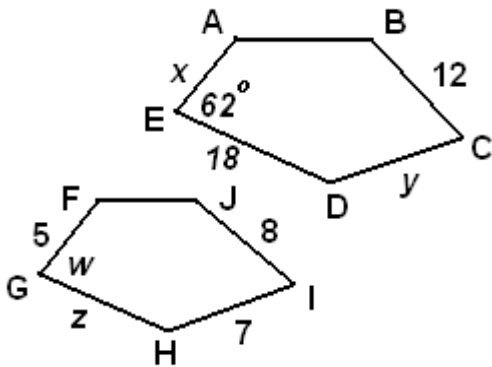
- 2.) Define similar polygons.  
 3.) Similar Rectangles... find x.



- 4.) Are the polygons similar?



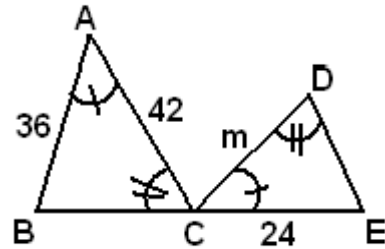
- 5.)  $ABCDE \sim FJIHG$



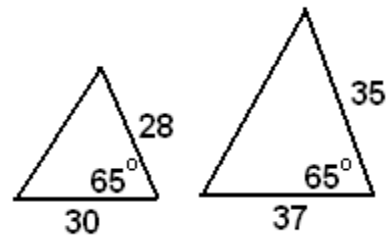
w =  
 x =  
 y =  
 z =

## Similar Triangles

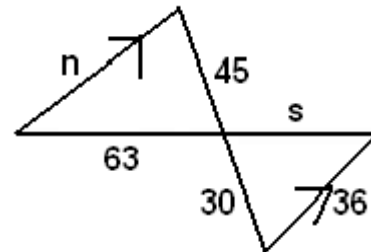
- 2.) If  $\triangle ABC \sim \triangle DEF$ , then  $AC / BC = ?$   
 3.) Solve for m.



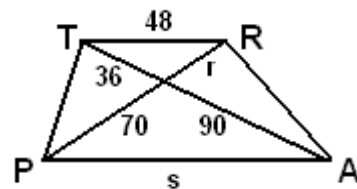
- 4.) Are the triangles similar?



- 5.) Why are the triangles similar? Solve.

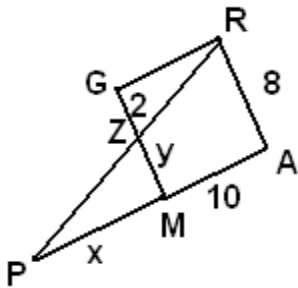


- 6.) In trapezoid TRAP, find r and s.



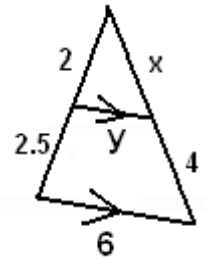
## Dilations

- 2.) What two things are always true with dilations?
- 3.) A quadrilateral has coordinates  $Q(-1,3)$ ,  $U(4,7)$ ,  $A(5,8)$ ,  $D(2, 5)$ . It undergoes a dilation of 1.5. What are the coordinates of the new figure?
- 4.) Two triangles have the following points:  
 $A(3,-5)$ ,  $B(2,1)$ ,  $C(-2, 2)$   
 $D(-6, 10)$ ,  $E(-4, -2)$ ,  $F(4, -4)$   
 What was the scale factor used in the dilation to transform  $\triangle DEF$  to  $\triangle ABC$ ?
- 5.) Find the scale factor used if given the before-and-after pictures of a dilation.
- (I will not include this one here)
- 6.) Given a figure, find its dilation if a scale factor of  $\frac{1}{2}$  is used.  
 (Construct it)
- 5.) Find  $x$ ,  $y$  (GRAM is a p-gram).

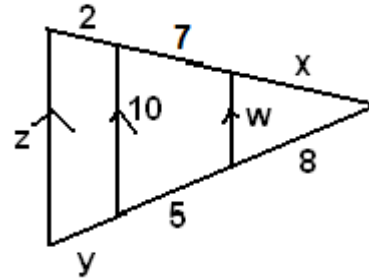


## Side-Splitting

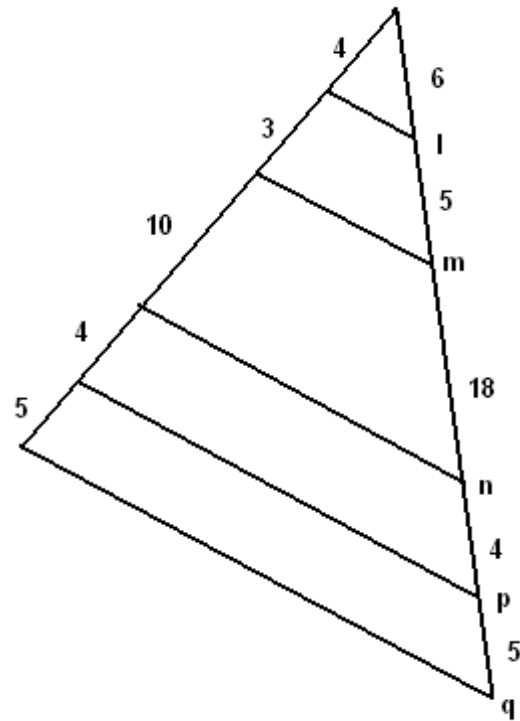
- 2.) Find  $x$  and  $y$ .



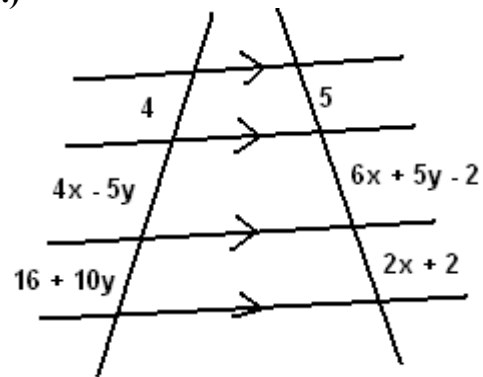
- 3.) Find  $w$ ,  $x$ ,  $y$ ,  $z$ .



- 4.) Which lines are parallel?

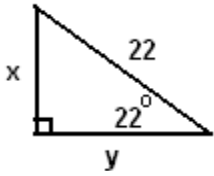


- 6.)

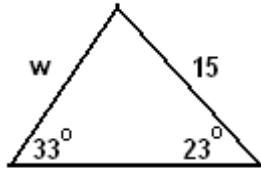


**Trig - Lengths**

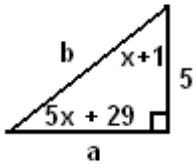
- 2.) Find  $x$  and  $y$ .



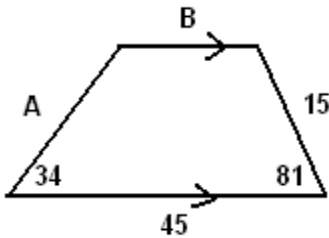
- 3.) Find the value of  $w$ .



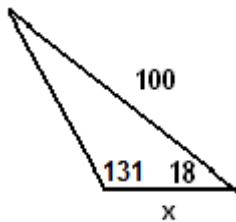
- 4.) Find  $x$ ,  $a$ , and  $b$ .



- 5.) Find  $a$  and  $b$ .

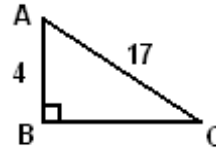


- 6.) Find the value of  $x$ .



**Trig Angles**

- 3.) Find the measures of the acute angles.

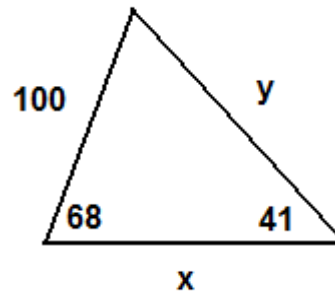


- 4.) Find the measures of the acute angles in a 7-24-25 right triangle.

- 5.) A 15 foot ladder is placed against the rim of a 10 foot basketball hoop. What is the measure of the angle of depression between the rim and ladder?

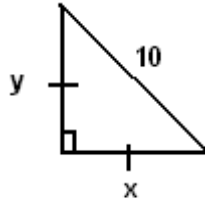
- 6.) A picture at an art museum is 12 feet tall, and its bottom is 4 feet above ground. Josh (whose eyes are 6 feet above ground) looks at the picture from a distance of 30 feet. What angle do his eyes form with the top and bottom of the photo?

- 7.) **TRIG LENGTHS**

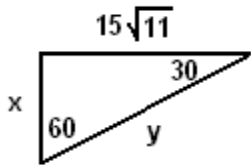


**Special Right Triangles**

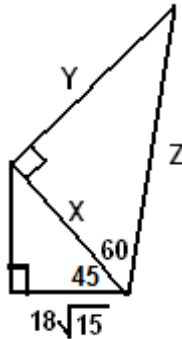
1.) Find x and y.



2.) Find x and y.

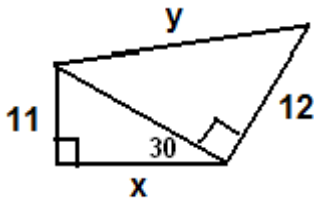


3.)

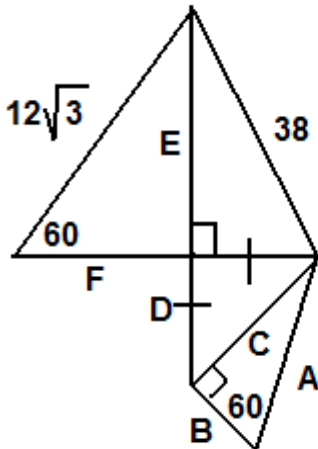


4.) A baseball diamond is really a square with side lengths of 90 feet. Given this information, find the exact length from home plate to second base.

5.)



6.)



A = \_\_\_\_\_

B = \_\_\_\_\_

C = \_\_\_\_\_

D = \_\_\_\_\_

E = \_\_\_\_\_

F = \_\_\_\_\_

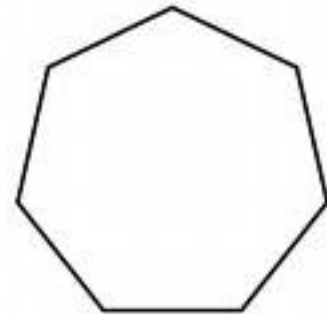
**Trig Apps**

3.) A lighthouse 55 meters above sea level spots a distress signal from a sailboat. The angle of depression to the boat is 23 degrees. How far away is the boat from the base of the lighthouse, to the nearest meter?

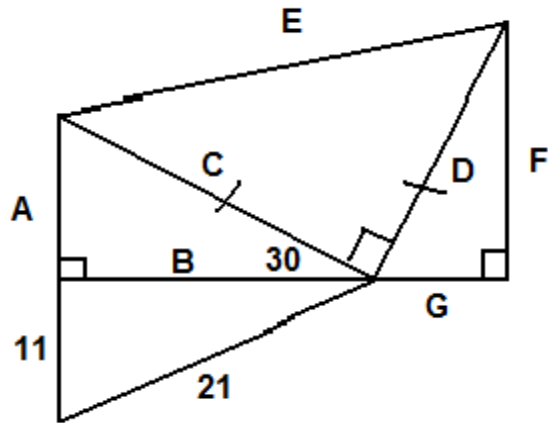
4.) Ben, who is 5.5 feet tall, is flying a kite with 125 feet of string expanded (pulled tight). The string makes a 31 degree angle with Ben's head. How high above the ground is the kite, to the nearest tenth of a foot.

5.) A tourist drops a stone from the top of the Leaning Tower of Pisa (whose length is 55 meters), it lands 4.8 meters from the base of the tower. What is the angle of depression of the Tower?

10.) Find the area of a regular heptagon (7 sides) that has a side length of 10.

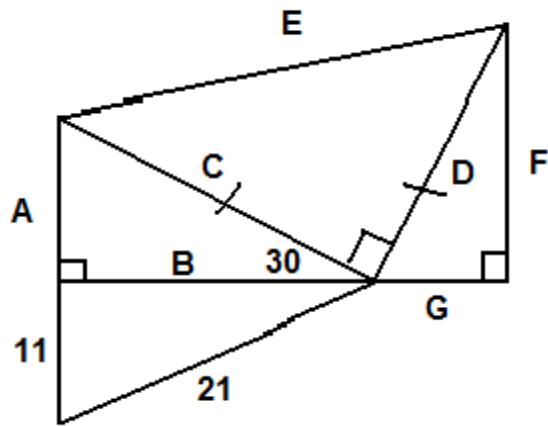


**FINAL JEOPARDY – EXACT FORM**



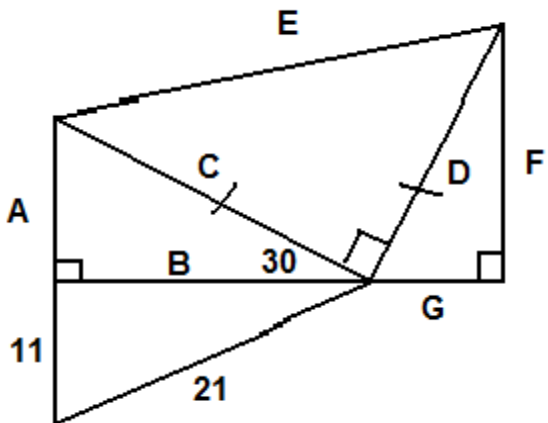
- A = \_\_\_\_\_
- B = \_\_\_\_\_
- C = \_\_\_\_\_
- D = \_\_\_\_\_
- E = \_\_\_\_\_
- F = \_\_\_\_\_
- G = \_\_\_\_\_

**FINAL JEOPARDY – EXACT FORM**



- A = \_\_\_\_\_
- B = \_\_\_\_\_
- C = \_\_\_\_\_
- D = \_\_\_\_\_
- E = \_\_\_\_\_
- F = \_\_\_\_\_
- G = \_\_\_\_\_

**FINAL JEOPARDY – EXACT FORM**



- A = \_\_\_\_\_
- B = \_\_\_\_\_
- C = \_\_\_\_\_
- D = \_\_\_\_\_
- E = \_\_\_\_\_
- F = \_\_\_\_\_
- G = \_\_\_\_\_