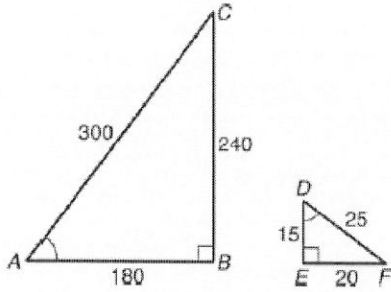
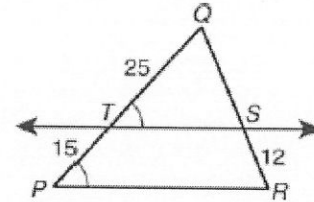


1. A student made a model of a building. The model was 3 feet high and 12 feet wide. The building is 720 feet side. Find the height of the building.

2. Which similarity statement is true for the triangles shown?



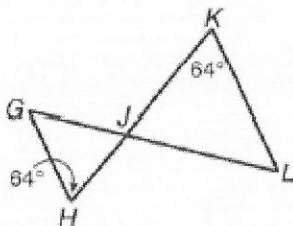
3. What is the length of  $\overline{QS}$  ?



4. The ratio of a dog park's length to its width is 11:9 . If the width of the field is 180 yards, what is the length of the field?

5. Mentone, Indiana, Claims to have the world's largest egg sculpture. A 6 ft tall person standing next to the egg sculpture casts a shadow that is 2 ft long. If the egg casts a shadow that is 4 ft. long, how tall is the sculpture?

6. Explain why the triangles are similar.




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Solve each proportion. Please show your work.

$$7. \frac{x}{x+4} = \frac{2}{x}$$

$$8. \frac{x}{x+1} = \frac{10}{x+7}$$

$$9. \frac{1}{x+1} = \frac{x}{2}$$

Please be sure to show and explain your work.

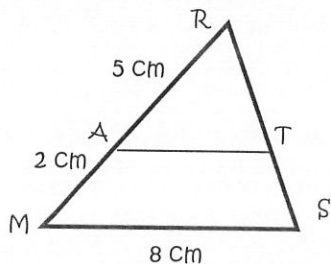
10. The ratio of the sculpture of Chief Crazy Horse to actual size is 140 to 1. Estimate the diameter of the horse's nostril in the sculpture. Assume the diameter of a horse's nostril is 3 inches.
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
11. The ratio of the Stone Mountain sculpture to actual size is 20 to 1. Estimate the length of the horse's head in the sculpture. Assume that the length of a horse's head is 2.5 ft.
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
12. The ratio of the angle measures in a triangle are 3 : 4 : 8. Find the measure of the largest angle.
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
13. The ratio of the side lengths of a pentagon is 2 : 3 : 5 : 6 : 9. The perimeter of the pentagon is 150 in. What are the side lengths of the pentagon?

14. Given that  $\triangle ABCD \sim \triangle EFGH$ ,  $DA = 8$  cm,  $HE = 6$  cm, Perimeter of  $\triangle ABCD = 65$  and Area of  $\triangle ABCD = 200$   $\text{cm}^2$ , find both the perimeter and area of  $\triangle WXYZ$ .

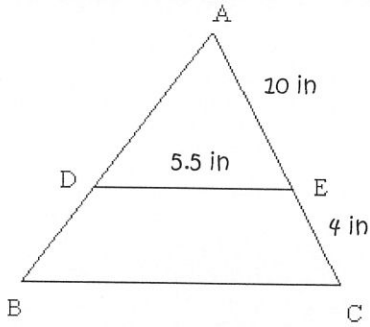
15. A basketball court is 84 ft. by 50 ft. Using the scale factor of 0.25 in : 4 ft., find the dimensions of the model of the basketball court.

16. Given that  $\triangle PQR \sim \triangle MNO$  and  $PQ = 10$  ft. and  $MN = 30$  ft. Find both the perimeter and area of  $\triangle PQR$  given the perimeter of  $\triangle MNO = 96$  ft. and the area of  $\triangle MNO = 450$   $\text{ft.}^2$ .

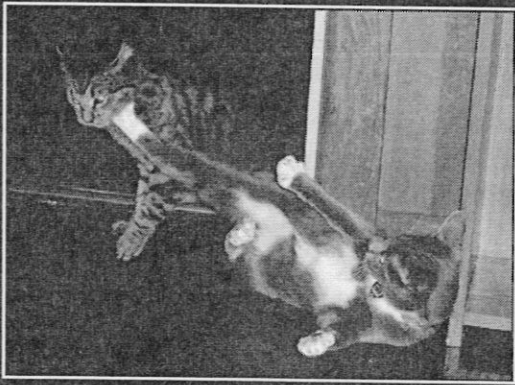
17. Use the figure below to find the length of  $AT$ .



18. To measure the distance across a pond, a surveyor locates points A, B, C, D, and E as shown. What is BC to the nearest meter?



Study For Your Test Tomorrow!!!



**HIGH KICK**

Chuck Norris would be proud