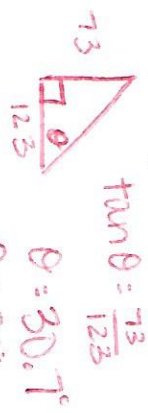


1. In a right triangle, the side that is opposite angle  $\theta$  measures 73 feet and the side adjacent to angle  $\theta$  is 123 feet. Find  $\theta$  to the nearest degree.



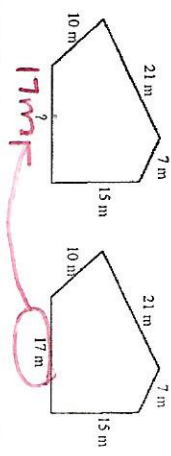
73



$\tan \theta = \frac{73}{123}$   
 $\theta = 30.7^\circ$

$\theta = 31^\circ$

123

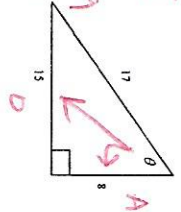


2. Determine the missing measure in the set of congruent polygons.



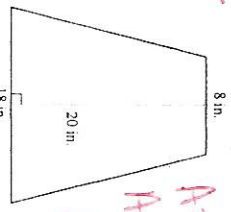
$b = 17.5$

3. Find AC. Round your answer to the nearest tenth.  
 4. Determine the hypothesis of the statement. If p, then q.  
 5. Find  $\theta$  to the nearest degree.



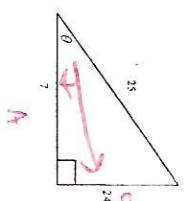
$\tan \theta = \frac{15}{8}$   
 $\theta = 61.9^\circ$

$\theta = 62^\circ$



7. Find the area of the trapezoid.

$A = 240 \text{ m}^2$



$\tan \theta = \frac{24}{7}$   
 $\theta = 73.7^\circ$

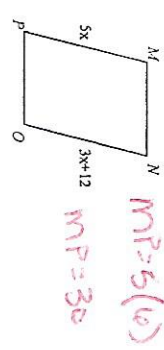
$\theta = 74^\circ$

9. Use your calculator to find the acute angle measures  $\sin^{-1}(0.45)$ ,  $\cos^{-1}(0.2)$ , and  $\tan^{-1}(4.28)$  to the nearest tenth of a degree.

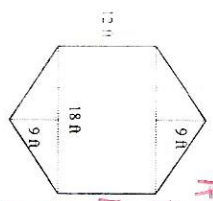
10. Given a conditional statement of the form "If s, then t", what form is its inverse?

If not s, then not t.

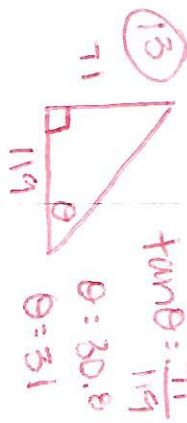
$5x = 3x + 12$   
 $-3x = 3x + 12$   
 $\frac{Px}{2} = \frac{12}{2}$   
 $x = 6$



11. Find the area of the composite figure

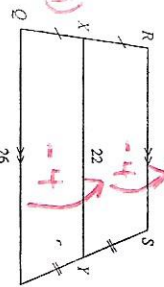


$A = bh$   
 $A = 16(13) = 208$   
 $A = 71.5 \text{ cm}^2$

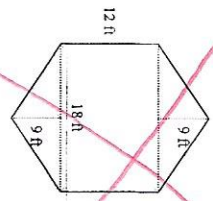


$\tan \theta = \frac{71}{119}$   
 $\theta = 30.8^\circ$   
 $\theta = 31^\circ$

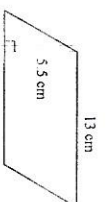
17. Find RS



18. Find the area of the composite figure

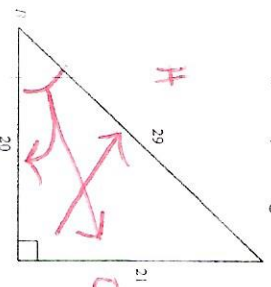


12. What is the interior angle measure of a regular pentagon?  
 13. In a right triangle, the side that is opposite angle  $\theta$  measures 71 feet and the side adjacent to angle  $\theta$  is 119 feet. Find  $\theta$  to the nearest degree.  
 14. Write the inverse of the statement, "If a coin is a quarter, then it is worth 25 cents."  
 15. Find the area of the parallelogram



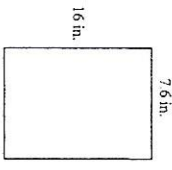
$A = bh$   
 $A = 5.5(13) = 71.5$

16. Give the sine, cosine, and tangent of  $\angle B$



$\sin B = \frac{21}{29}$   
 $\cos B = \frac{20}{29}$   
 $\tan B = \frac{21}{20}$

21. Find the area of the rectangle.

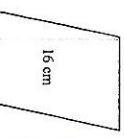


$A = bh$   
 $A = 16(7.6) = 121.6$



$\tan \theta = \frac{x}{23}$   
 $x = 11.2$

19. A tree casts a shadow of 23 meters when the angle of elevation of the sun is  $26^\circ$ . Find the height of the tree to the nearest meter.



$A = bh$   
 $A = 16(7.5) = 120$