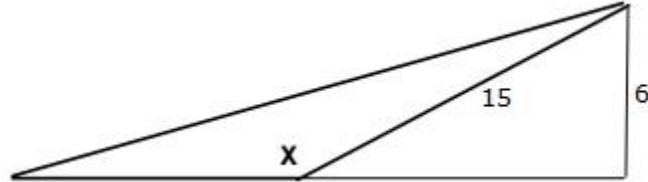
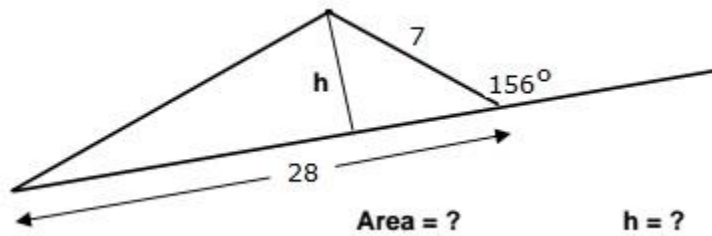


**Review Test**  
**Practical Math Foundation**  
**Tier 2 Trigonometry**  
 Introduction to Trigonometry

1) Given the following diagram, solve for X.

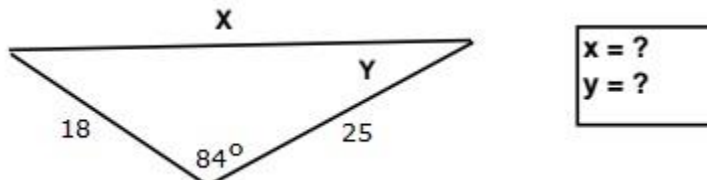


2) Given the following diagram, solve for h.



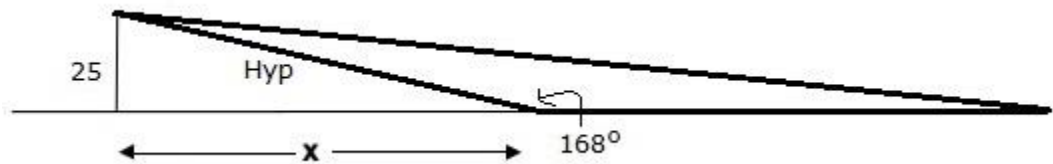
3) Given the above diagram, solve for the area.

4) Given the following diagram, solve for x.

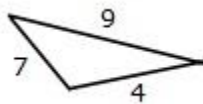


5) Given the above diagram, solve for  $y$ .

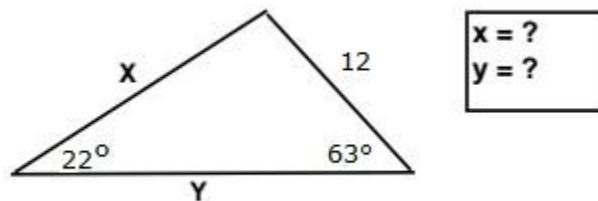
6) Given the following diagram, solve for  $X$ .



7) Find the area of this triangle.

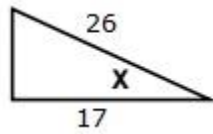


8) Given the following diagram, solve for  $x$ .

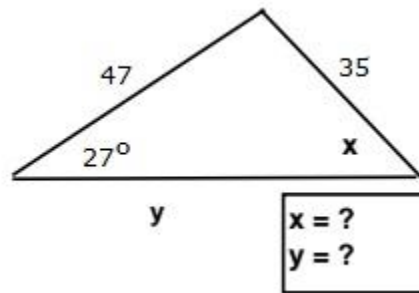


9) Given the above diagram, solve for  $y$ .

10) Given the following diagram, solve for X.

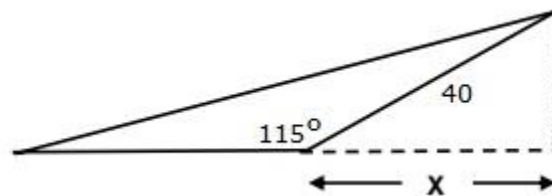


11) Given the following diagram, solve for x.



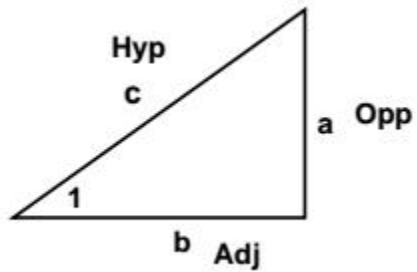
12) Given the above diagram, solve for y.

13) Given the following diagram, solve for X.

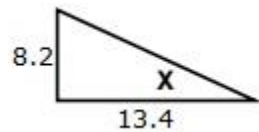


14) Solve for X:  $\text{TAN}^{-1}[\text{SIN}(36.2^\circ)] = X$

15) Given the following diagram, what are the ratios for each of the three trig functions?



16) Given the following diagram, solve for X.



# Review Test Answer Key

## Practical Math Foundation

### Tier 2 Trigonometry

#### Introduction to Trigonometry

- 1)  $156.4^\circ$  (T2 - SIN X)
- 2)  $h = 2.85$  (T2 - SIN X)
- 3)  $\text{area} = 39.9$  (T2 - SIN X)
- 4)  $x = 29.24$   $x^2 = (18)^2 + (25)^2 - 2(18)(25)\text{COS}(84^\circ)$   
(T7 - Law of Cosines, Generalized Pythagorean Theorem)
- 5)  $y = 37.75^\circ$   $y = \text{SIN}^{-1}[\{\text{SIN}(84^\circ)/29.24\} \times 18]$   
(T7 - Law of Cosines, Generalized Pythagorean Theorem)
- 6)  $x = 117.6$  (T4 - TAN X)
- 7)  $\angle 4,7 = \text{COS}^{-1}[(4^2 + 7^2 - 9^2)/(2 \times 7 \times 4)]$   
 $\angle 4,7 = 106.6^\circ$   
 $\text{Area} = 0.5 \times \text{SIN}(106.6^\circ) \times 4 \times 7 = 13.42 \text{ U}^2$   
(T7 - Law of Cosines, Generalized Pythagorean Theorem)
- 8)  $x = 28.5$  (T6 - Law of Sines)
- 9)  $y = 31.9$  (T6 - Law of Sines)
- 10)  $x = 49.1^\circ$  (T3 - COS X)
- 11)  $x = 37.6^\circ$  (T6 - Law of Sines)
- 12)  $y = 69.6$  (T6 - Law of Sines)
- 13)  $x = 16.9$  (T3 - COS X)
- 14)  $X = 30.57^\circ$  (T1 - Trig Functions)
- 15)  $\text{SIN} = \text{Opp}/\text{Hyp}$  (a/c),  $\text{COS} = \text{Adj}/\text{Hyp}$  (b/c),  $\text{TAN} = \text{Opp}/\text{Adj}$  (a/b)  
(T1 - Trig Functions)
- 16)  $x = 31.5^\circ$  (T4 - TAN X)