

**G10. Warming Up Activity 6****Multiple Choice**

Identify the choice that best completes the statement or answers the question.

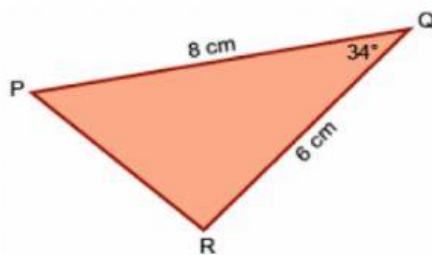
1. Given that  $\cos \theta = \frac{1}{7}$  and  $\theta$  is acute, find the exact value of  $\tan \theta$ .

a.  $\frac{1}{4\sqrt{3}}$   
 b. 7  
 c.  $4\sqrt{3}$   
 d.  $\frac{4\sqrt{3}}{7}$

2. Given that  $\tan A = \frac{4}{3}$ , where A is in the third quadrant. What is the value of  $\sin A$ ?

a.  $\frac{4}{5}$   
 b.  $-\frac{4}{5}$   
 c.  $-\frac{3}{5}$   
 d.  $\frac{3}{5}$

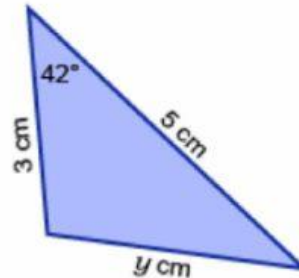
3.



Which of these substitutions is correct for this triangle?

- a.  $PR^2 = 8 + 6 - 2 \times 8^2 \times 6^2 \times \cos 34^\circ$   
 b.  $PR^2 = 8 + 6 - 8^2 \times 6^2 \times \cos 34^\circ$   
 c.  $PR^2 = 8^2 + 6^2 - 8 \times 6 \times \cos 34^\circ$   
 d.  $PR^2 = 8^2 + 6^2 - 2 \times 8 \times 6 \times \cos 34^\circ$

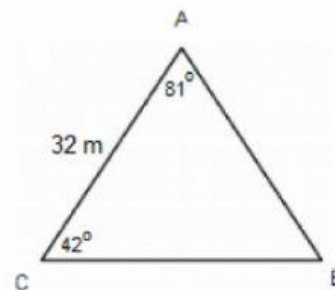
4.



Determine the value of y correct to **one decimal place**.

- a. 2.5 cm  
 b. 7.3 cm  
 c. 4.6 cm  
 d. 3.4 cm

5. In  $\triangle ABC$ ,  $A = 81^\circ$ ,  $C = 42^\circ$ , and side  $AC = 32$  m. Find the length of BC. (correct to the nearest meter)



- a. 22 m  
 b. 27 m  
 c. 38 m  
 d. 47 m