

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

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

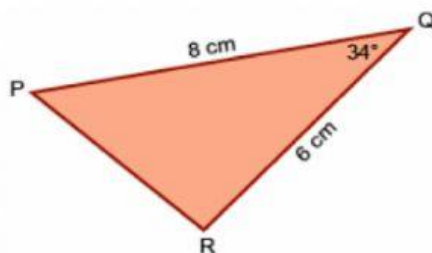
1. Given that $\cos \theta = \frac{1}{7}$ and θ is acute, find the exact value of $\tan \theta$.

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. $\frac{3}{5}$

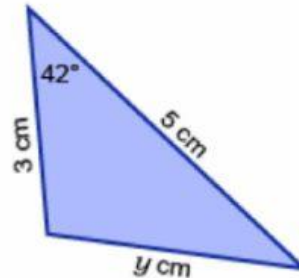
3.



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. $PR^2 = 8^2 + 6^2 - 2 \times 8 \times 6 \times \cos 34^\circ$

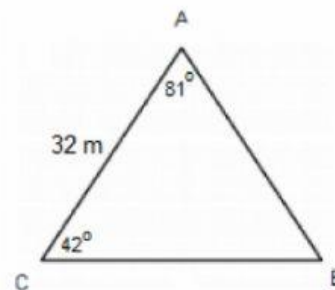
4.



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