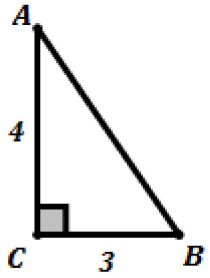
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Unit 04-01 - Right Triangle Trig

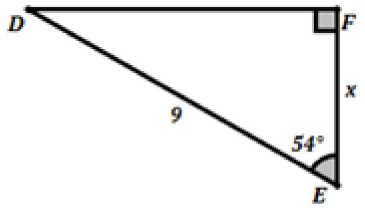
Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Find the value of $\tan(B)$.



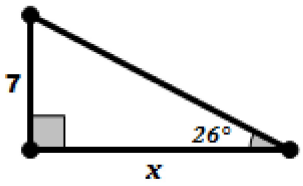
a. $\frac{3}{4}$
b. $\frac{3}{5}$
c. $\frac{4}{5}$
d. $\frac{4}{3}$

____ 2. Determine the approximate value of x using basic trigonometry.
(Round to the nearest hundredth..)



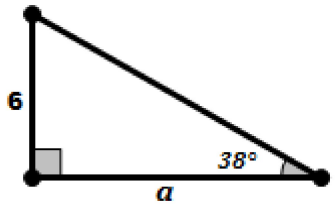
a. $x \approx 5.29$
b. $x \approx 7.46$
c. $x \approx 10.85$
d. $x \approx 17.01$

____ 3. Determine the approximate value of x using basic trigonometry.
(Round to the tenths if necessary.)



a. $x \approx 0.1$
b. $x \approx 3.4$
c. $x \approx 6.3$
d. $x \approx 14.4$

____ 4. Which of the following statements would best represent the value of a?



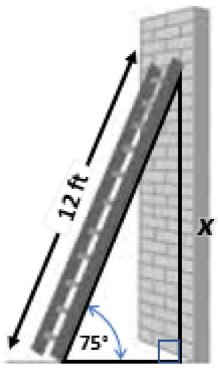
a. $a = 6\cos(38°)$

b. $a = \dfrac{6}{\sin(38°)}$

c. $a = \dfrac{6}{\tan(38°)}$

d. $a = 6\tan(38°)$

____ 5. A 12 foot ladder leans against a building at a 75° with the ground. Which equation below can be used to find how high the ladder reaches up the side of the building?



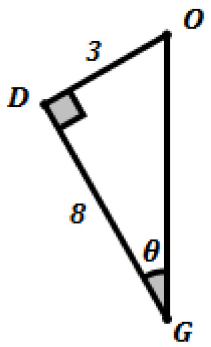
a. $\sin(75°) = \dfrac{12}{x}$

b. $\tan(75°) = \dfrac{12}{x}$

c. $\cos(75°) = \dfrac{x}{12}$

d. $\sin(75°) = \dfrac{x}{12}$

____ 6. Determine the approximate value of θ.



a. 20.6°

b. 22.0°

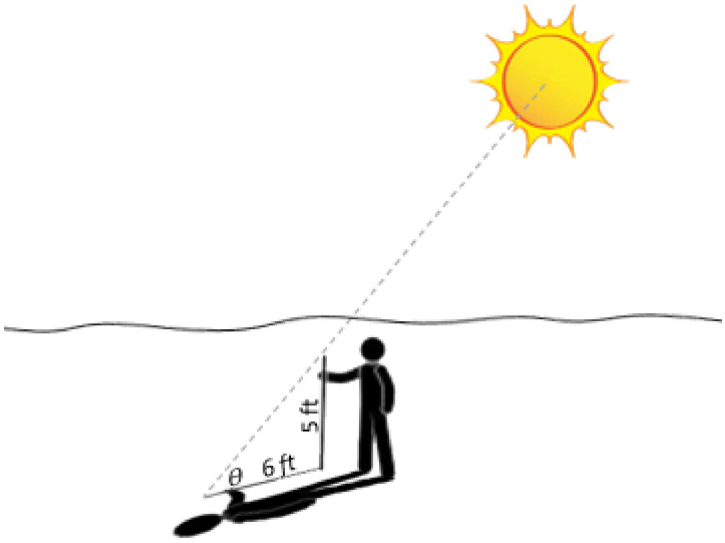
c. 68.0°

d. 69.4°

____ 7. A person was walking on a relatively flat surface in the salt flats in Utah.

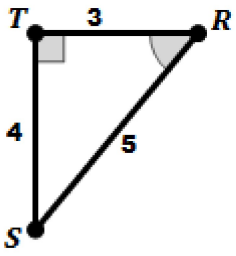
The person noticed that their 5 foot walking cane when held up vertical cast a 6 foot shadow.

What is the angle of elevation of the sun?



a. 36.16°
b. 39.81°
c. 50.19°
d. 52.78°

____ 8. Which is the only expression below that **DOES NOT** represent the measure of $\angle R$?



a. $\tan^{-1}\left(\frac{4}{3}\right)$
b. $\cos^{-1}\left(\frac{3}{5}\right)$
c. $\cos^{-1}\left(\frac{4}{5}\right)$
d. $\sin^{-1}\left(\frac{4}{5}\right)$