

11U U5 -Trig Ratios - Assessment (Abby)

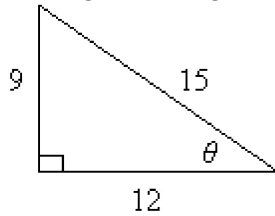
K ___/11 T ___/16 C ___/3 A ___/10

Multiple Choice

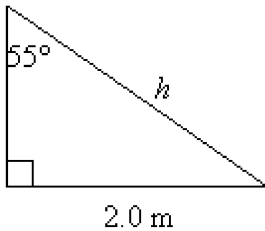
K ___/3 T ___/4

Identify the choice that best completes the statement or answers the question. Circle the letter representing your choice and write your letter in appropriate blank.

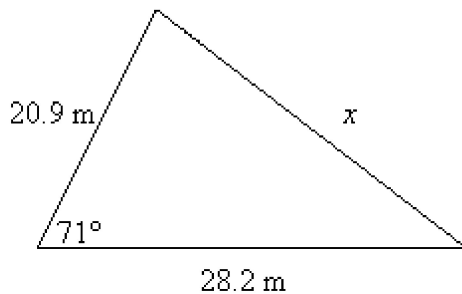
1. For the given triangle, determine θ to the nearest degree.



- a. 37
b. 38
c. 39
d. 40
2. Determine the length of the hypotenuse of the triangle to the nearest tenth of a metre.



- a. 3.1 m
b. 2.4 m
c. 2.1 m
d. 2.9 m
3. Determine x to the nearest tenth of a metre.



- a. 29.1 m
b. 30.2 m
c. 31.6 m
d. 32.9 m

9. For each question, draw the angle of rotation and determine the EXACT trig ratio:
a) $\cos(210^\circ)$ b) $\sin(315^\circ)$ c) $\tan(120^\circ)$

T ____/6

10. Given the trig ratio determine **both possible** values for θ where $0^\circ \leq \theta \leq 360^\circ$:

T ____/6

a) $\cos(\theta) = -\frac{\sqrt{3}}{2}$

b) $\sin(\theta) = \frac{1}{\sqrt{2}}$

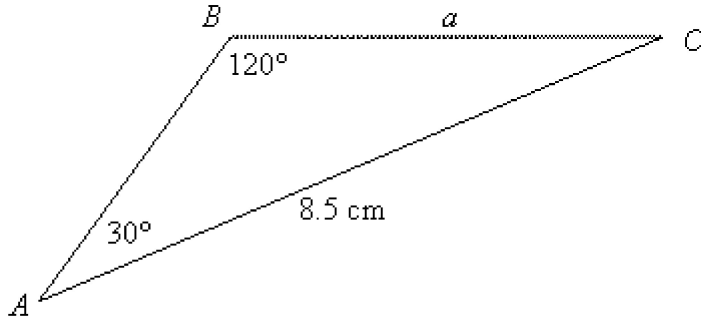
c) $\sin(\theta) = -0.368$

11. Determine the exact value of $\frac{\cos^2 45^\circ}{\sin 30^\circ} \times \tan 60^\circ$.

K ____/3

12. Determine the length of a to the nearest tenth of a cm.

K ___/3



13. The posts of a hockey goal are 2.0 m apart. A player attempts to score by shooting the puck along the ice from a point 12.0 m from one post and 10.1 m from the other. Within what angle θ must the shot be made? Round your answer to the nearest degree.

A ___/3

14. Prove the identity $\frac{\sin(\theta) \times \tan(\theta)}{\sec(\theta)} = 1 - \cos^2(\theta)$

A ____/4

15. Determine the value of x to the nearest tenth of a *cm*.

A ____/3

