## 9.4 Tangent Trigonometric Ratio CYU

☑ Use when you get it right all by yourself

 $oldsymbol{\mathcal{S}}$  Use when you did it all by yourself, but made a silly mistake

**H**Use when you could do it alone with a little help from teacher or peer

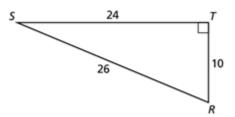
**G** Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

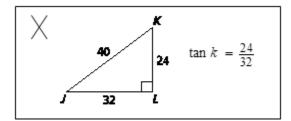
NUse when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Tangent ratio	1, 2	3 - 8	
Exact answer	1, 3 - 8		
Rounded answer	1, 3 - 8	9 - 11	
Error Analysis		2	
Real- World Application			12 - 13
Inverse Tangent		9 - 11	

1. Find the tangent of the acute angles in the triangle provided. Write each answer as a fraction AND as a decimal rounded to four decimal places.

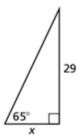


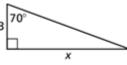
2. Describe and correct the error in writing the statement of the tangent ratio for the given figure.

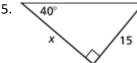


Find the value of x. Leave your answer exact and rounded to the nearest tenth.

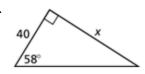
3.



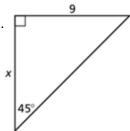




6.



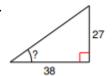
7.



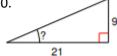
8. x

Find the indicated angle measure to the nearest degree. Show the set up to earn full credit.

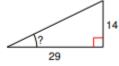
9.



10.

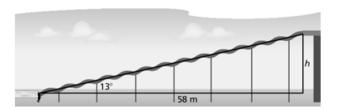


11.

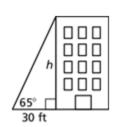


## Real World Application

12. You are measuring the height of a water slide. You stand 58 meters from the base of the slide. You measure the angle of elevation from the ground to the top of the water slide to be 13°. Find the height h of the slide to the nearest meter.



13. A surveyor is standing 30 feet from the base of a tall building. The surveyor measures the angle of elevation from the ground to the top of the building to be 65°. Find the height, *h*, of the building to the nearest foot.



**CYU Reflection:** How far can you go: basic, intermediate, or advanced?

## Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

