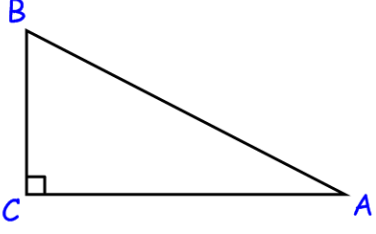


Name: _____

MAP4C – Trigonometry Review Part 1

1. Fill in the blanks.

Use the word bank below to fill in the blanks. Some words will be used more than once.

sin (angle) = _____		If the reference angle is A
cos (angle) = _____		a is the _____
tan (angle) = _____		b is the _____ c is the _____
Word Bank: opposite, adjacent, hypotenuse		

2. Evaluate on a calculator. **Round to 4 decimal places.**

Note: ensure your calculator is set to **degrees** by evaluations $\sin 45 \rightarrow$ answer should be 0.7071

sin 30° =	cos 25° =	tan 60° =
sin 72° =	cos 47° =	tan 15° =

3. Use your calculator to solve for the indicated angle. **Round to the nearest whole degree.**

Remember: When you are solving for an angle use the \sin^{-1} , \cos^{-1} and \tan^{-1} buttons!

sin A = 0.9063	cos B = 0.3746	tan C = 2.7286
sin D = 0.6231	cos E = 0.8524	tan F = 1.0000

4. Solve for the indicated angle. Show your intermediate step.

Round your final answer to the nearest whole degree.

$\sin G = \frac{4.6}{8.3}$	$\cos H = \frac{19.5}{39.2}$	$\tan I = \frac{65.5}{22.8}$
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Name: _____

5. Solve for the indicated side. Show your work!

Round your final answer to one decimal place.

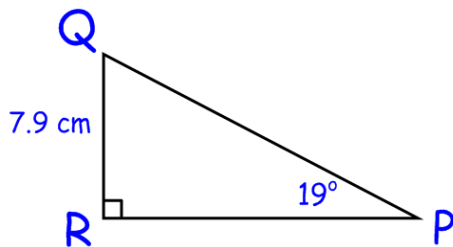
$\sin 67^\circ = \frac{j}{19.4}$	$\cos 32^\circ = \frac{k}{42.6}$	$\tan 17^\circ = \frac{l}{96.2}$
$\sin 14^\circ = \frac{4.6}{m}$	$\cos 72^\circ = \frac{20.1}{n}$	$\tan 82^\circ = \frac{8.9}{o}$

6. "Solve" each triangle: find the measures of all sides and angles!

Round side lengths to one decimal place and angles to the nearest whole degree.

Show all of your work!

Show your work here



Provide your answers here

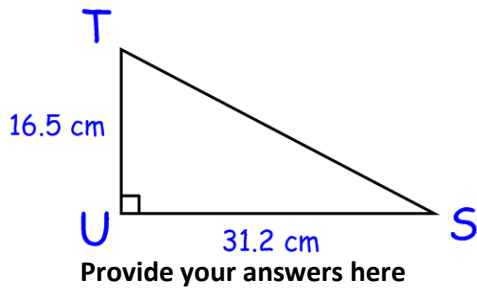
P = _____ p = _____

Q = _____ q = _____

R = _____ r = _____

Name: _____

Show your work here

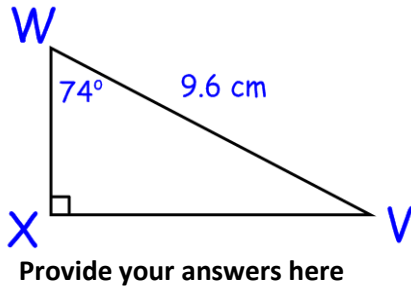


S = _____ s = _____

T = _____ t = _____

U = _____ u = _____

Show your work here

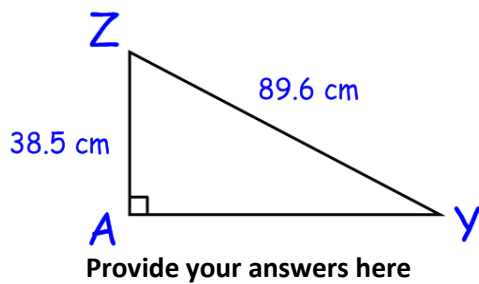


V = _____ v = _____

W = _____ w = _____

X = _____ x = _____

Show your work here



Y = _____ y = _____

Z = _____ z = _____

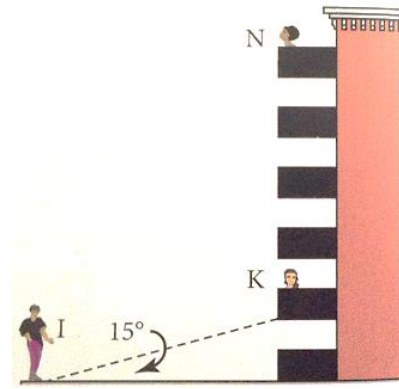
A = _____ a = _____

Name: _____

7. Isaac is on the ground, waving to his friend Kayla, who is on the second floor balcony of a 6-storey apartment building.

Isaac is 25 m from the base of Kayla's apartment building. He estimates that the angle of elevation from the ground to the bottom of Kayla's balcony is 15 degrees.

- Approximately how high is Kayla's balcony above the ground?
- How tall is the apartment building?
- Natalie lives on the top floor. Her apartment is directly above Kayla's. Suppose Natalie comes to the balcony to wave to Isaac. What is the angle of elevation to the bottom of Natalie's balcony?



8. To determine the height of identical power distribution towers, Joanne stands exactly halfway between the two towers and measures the angle of inclination to one of the towers. The horizontal distance between the towers is 70 m. determine the height of the towers.

