

TRIGONOMETRY REVIEW

1. Find each value to 4 decimal places.

a) $\sin 25^\circ$

b) $\cos 7^\circ$

c) $\tan 44^\circ$

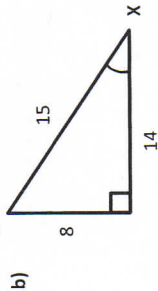
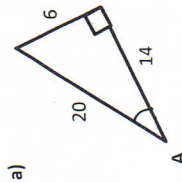
2. Find the measure of the angle to the nearest degree.

a) $\sin A = 0.3333$

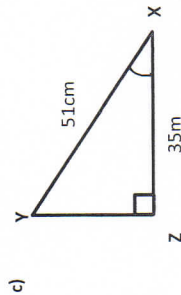
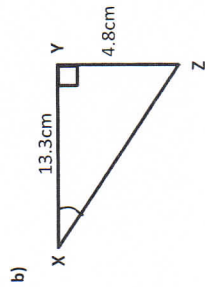
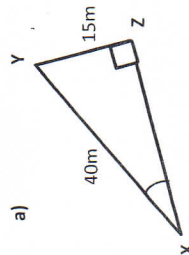
b) $\cos B = 0.0123$

c) $\tan C = 0.8910$

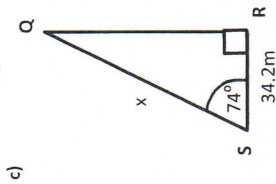
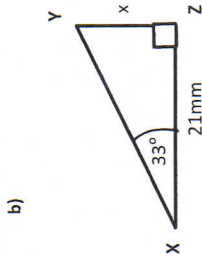
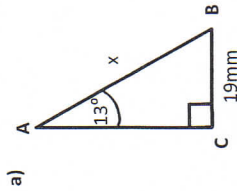
3. For each triangle below, write three ratios for the marked angle. Do not solve.



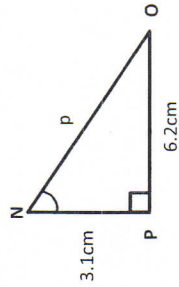
4. Find the measure of $\angle X$ to the nearest degree.



5. Find the length of the indicated side to one decimal place.



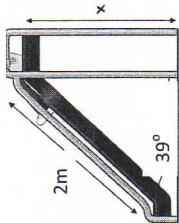
6. Use Pythagorean Theorem to find the length of the unknown side p to one decimal place first, then determine the measure of $\angle N$ using the trig ratio of your choice.



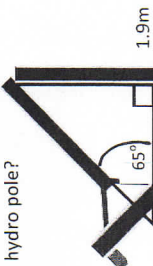
7. A skateboard ramp is built on an incline so that it rises 1.3m. What is the angle between the ground the diagonal space?



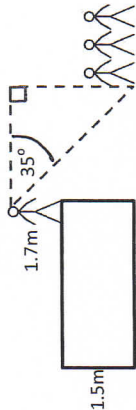
8. A new slide has been put into the playground. The slide is 2m long and the incline of the slide to the ground is 39° . How high is the slide off the ground to 1 decimal place?



9. During a severe ice storm, a hydro pole was damaged and the top part of it broke off so it now touches the ground. The broken off piece forms a 65° angle to the ground. Before it was damaged, how tall was the hydro pole?



11. A musician is on a stage during a concert. The musician is 1.7m tall, while the school stage is 1.5m tall. He is looking down at the first row at an angle of depression of 35° . How far is the stage from the first row of fans?



12. A surveyor is trying to determine the height of a building using a 1.7m transit instrument. From a distance of 35m from the building she is found the angle of elevation to be 33° . What would she find to be the height of the building to one decimal? Draw a diagram to help with your solution.

10. The angle of depression from the top of a lighthouse is 43° . The lighthouse is 32m tall. How far is the boat from the base of the lighthouse?

