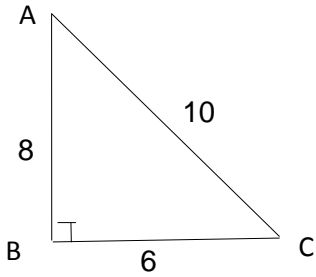
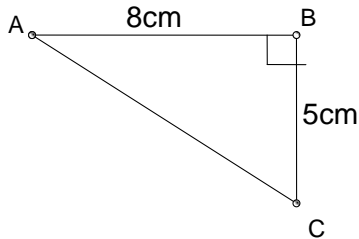


Math 1201 Final Exam Review Trigonometry

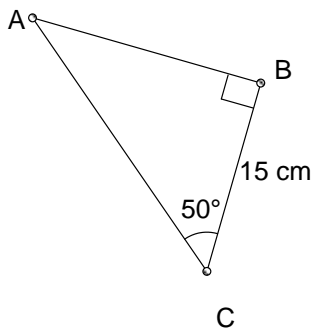
1. Write the RATIO for  $\sin \angle A$ ,  $\cos \angle A$  and  $\tan \angle A$ .



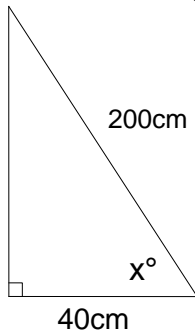
2. Find the value of  $\angle A$  to the nearest degree.



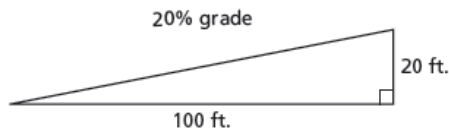
3. Find the length of side AB to the nearest tenth of a centimetre.



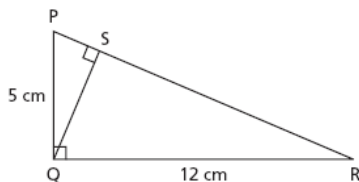
4. Find the missing angle to the nearest degree.



5. When a road has a grade of 20% it increases 20 ft in altitude for every 100 ft of horizontal distance. Calculate the angle of inclination, to the nearest degree, of a road with a grade of 20%.



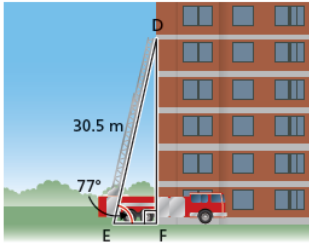
6. Determine the measures of all the acute angles in the diagram to the nearest degree.



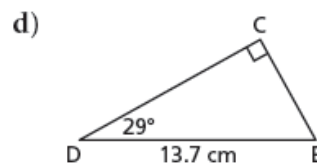
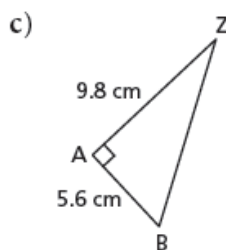
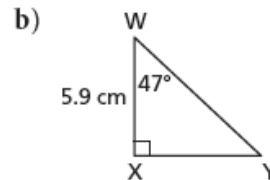
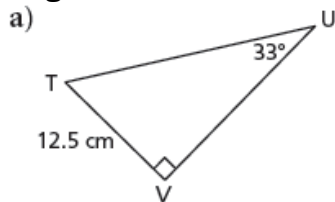
7. A guy wire helps to support a tower. The angle between the wire and the ground is  $50^\circ$ . One end of the wire is 15.4m from the base of the tower. How high up the tower does the wire reach to the nearest tenth of a metre?

8. In  $\triangle PQR$ ,  $\angle R = 90^\circ$ ,  $\angle P = 58^\circ$  and  $PR = 7.1$  cm. Determine the area of the triangle to the nearest tenth of a centimetre.

9. A ladder 6.5m long is resting on a building. The base of the ladder is 1.2m from the wall. What is the angle of inclination of the ladder to the nearest degree?
10. A fire truck has an aerial ladder that extends 30.5m measured from the ground. The angle of inclination of the ladder is  $77^\circ$ . How far up the wall of an apartment building can the ladder reach?



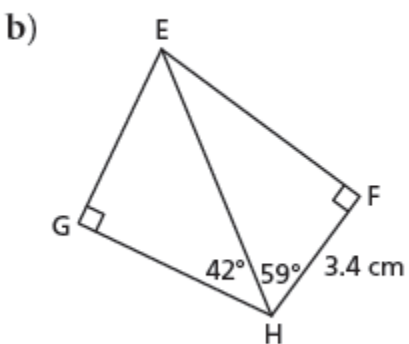
11. Solve each triangle.



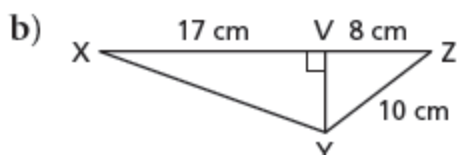
12. An architect draws this diagram of a wheelchair ramp for a building. Determine the length of the ramp.



13. Calculate the length of GH to the nearest tenth of a centimetre.



14. Calculate the measure of  $\angle XYZ$  to the nearest degree.



15. A communications tower has many guy wires to support it. Two of these guy wires are 8.0m and 10.0m long. They are attached to the same point on the ground. The longer wire has an angle of inclination of  $60^\circ$ .

