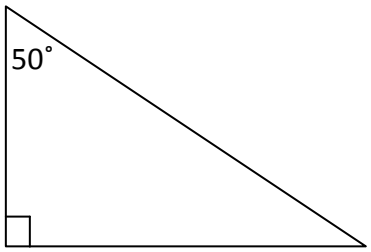
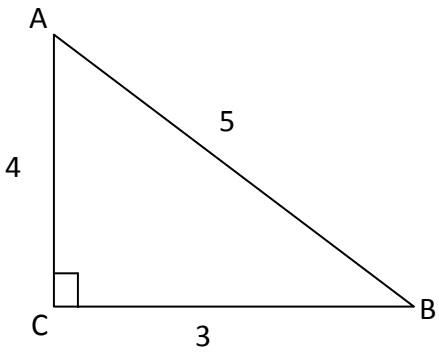
Math 10 Chapter 2 Review Name_____ /50

1. Given the diagram below and the angle 50°, **label the diagram**'s 3 sides as hypotenuse, side adjacent to 50°, side opposite to 50°. (2 marks)

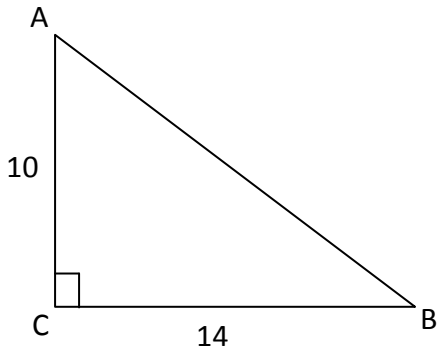


2. Given the diagram below, fill in the blanks for each ratio: (3 marks)

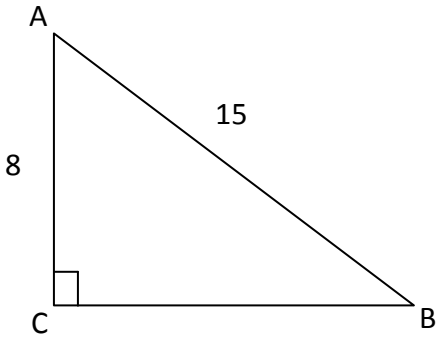


Tan A = $\frac{\square}{\square}$ Cos A = $\frac{\square}{\square}$ Sin B = $\frac{\square}{\square}$

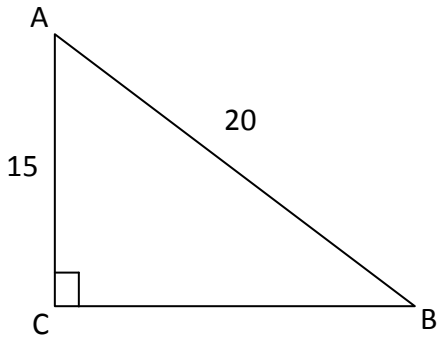
3. Given the diagram below, **find angle A** to the nearest whole degree. (3 marks)



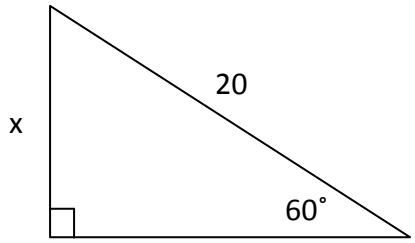
4. Given the diagram below, **find angle B** to the nearest whole degree. (3 marks)



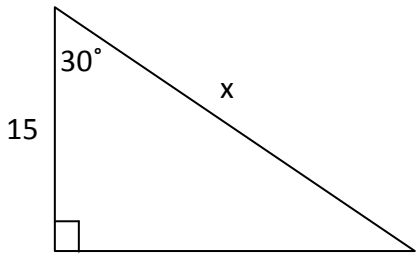
5. Given the diagram below, **find angle A** to the nearest whole degree. (3 marks)



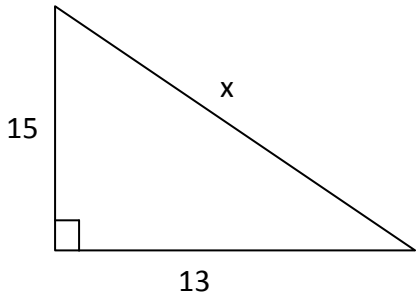
6. Given the diagram below, find x to the nearest tenth. (3 marks)



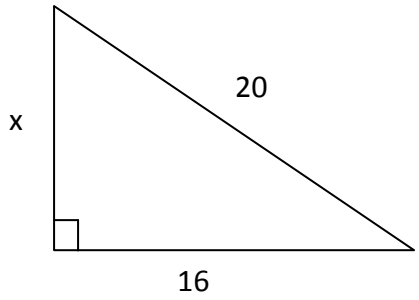
7. Given the diagram below, find x to the nearest tenth. (3 marks)



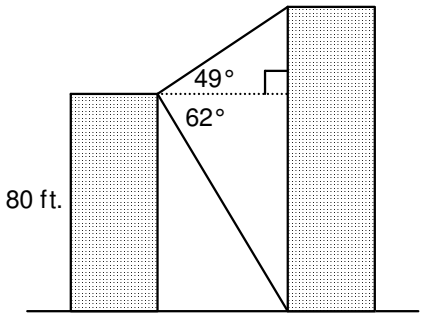
8. Given the diagram below, find x to the nearest tenth. (3 marks)



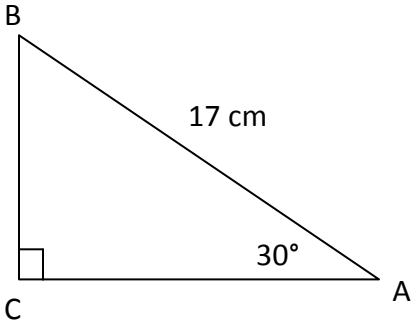
9. Given the diagram below, find x to the nearest tenth. (3 marks)



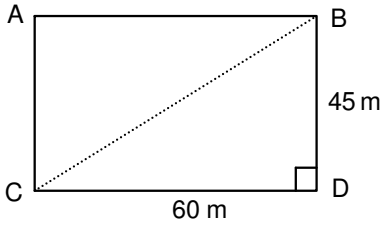
10. From the top of an 80-ft. building, the angle of inclination (elevation) of the top of a taller building is 49° and the angle of depression of the base of this building is 62°. Determine the height of the taller building to the nearest foot. (4 marks)



11. Solve the following triangle. Give all answers to the nearest tenth. (5 marks)



12. Rhonda walked diagonally across a rectangular playground with dimensions 60 m by 45 m. She started at point C. Determine the angle, to the nearest degree, between her path and the longest side of the playground. (3 marks)



13. A ladder leans against the side of a building. The top of the ladder is 5 m from the ground. The base of the ladder is 1.0 m from the wall. What angle, to the nearest degree, does the ladder make with the ground? Draw a diagram! (4 marks)

14. A helicopter is hovering 200 m above a road. A car stopped on the side of the road is 300 m from the helicopter. What is the angle of inclination (elevation) of the helicopter measured from the car, to the nearest degree? Draw a diagram! (4 marks)

15. From the start of a runway, the angle of inclination (elevation) of an approaching airplane is 17.5°. At this time, the plane is flying at an altitude of 7.7 km. How far is the plane from the start of the runway to the nearest tenth of a kilometer? Draw a diagram! (4 marks)