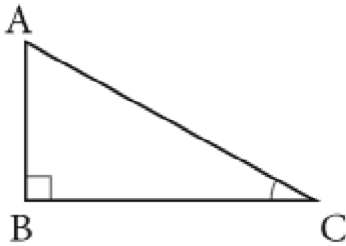


FOMP 10 Chapter 3 Review Pack v1

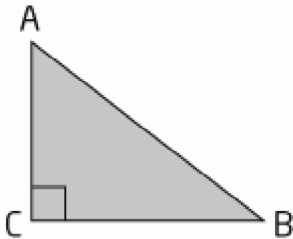
Short Answer

Level 1-2 Questions

1. In $\triangle ABC$, $AB = 8$ cm and $BC = 14$ cm. Determine the tangent ratio of $\angle A$, to the nearest thousandth.



2. In the triangle, $AC = 8$ cm and $\tan \angle B = 0.53$. What is the length of BC?



3. A right triangle has legs measuring 15 cm and 36 cm. The length of the hypotenuse is
4. Evaluate $\tan 23^\circ$, to four decimal places.
5. Determine the value of $\tan 64^\circ$, to four decimal places.

Name: _____

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6. If $\tan A = 0.1498$, determine the measure of $\angle A$, to the nearest degree.

7. If $\tan B = 2.4157$, determine the measure of $\angle B$, to the nearest degree.

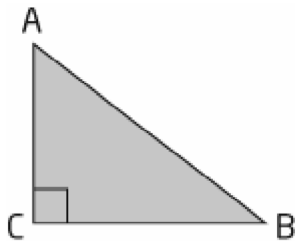
8. Evaluate $\tan 42^\circ$.

9. Evaluate $\sin 62^\circ$, to four decimal places.

10. Evaluate $\cos 49^\circ$, to four decimal places.

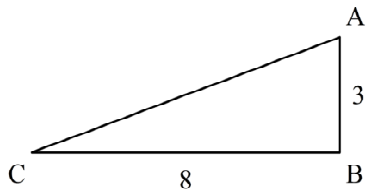
Level 3-4 Questions

11. In $\triangle ABC$, $AB = 68$ cm and $AC = 32$ cm. Determine the tangent ratio of $\angle B$, to the nearest hundredth.

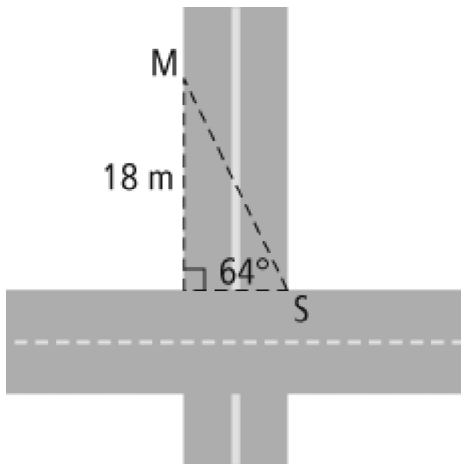


12. The ratio of vertical distance to horizontal distance for a flight of steps is 10 ft to 11 ft. Determine the angle that the steps make with the ground, to the nearest degree.

13. Determine the measure of $\angle C$, to the nearest degree.



14. A surveyor, S, is measuring the width of a street, using a marker, M. The surveyor cannot measure the width directly, because there is too much traffic. She stands on the east side of the intersection. The marker is on the west side of the intersection, and is 18 m north of the intersection. Determine the width of the street, to the nearest tenth of a metre.



15. A wheelchair ramp is being built for the entrance to a school. If the ramp makes an angle of 5° with the ground and has a horizontal length of 4 m, determine the height of the ramp, to the nearest tenth of a metre.

Name: _____

ID: A

16. A ladder leans against a vertical wall and makes an angle of 79° with the ground. The foot of the ladder is 1.6 m from the base of the wall. Determine the vertical distance from the ground to the top of the ladder, to the nearest tenth of a metre.

17. If $\cos A = 0.8526$, then the measure of $\angle A$, to the nearest degree, is

18. If $\cos B = 0.2368$, then the measure of $\angle B$, to the nearest degree, is

19. In a right triangle, $\sin B = 0.6214$. Determine the measure of $\angle B$, to the nearest degree.

20. In a right triangle, $\sin A = 0.2474$. Determine the measure of $\angle A$, to the nearest degree.

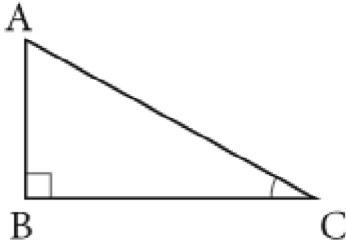
Level 5-6 Questions

21. In $\triangle TUV$, $UV = 19$ m, $\angle U = 90^\circ$, and $\angle T = 41^\circ$. Determine the length of UT , to the nearest metre.

22. In $\triangle ABC$, $AB = 20$ cm, $\angle B = 90^\circ$, and $\angle C = 75^\circ$. Determine the length of BC , to the nearest centimetre.

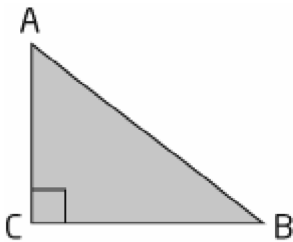
23. In $\triangle ABC$, $AB = 14$ cm, $\angle B = 90^\circ$, and $\angle C = 54^\circ$. Determine the length of AC , to the nearest centimetre.

24. In the triangle, $BC = 19$ cm and $\tan C = 0.316$. What is the length of the hypotenuse, to the nearest tenth of a centimetre?

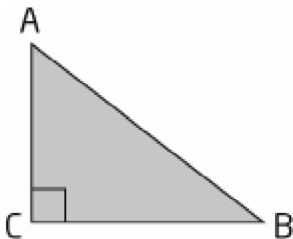


25. A school soccer field measures 50 m by 117 m. To get home more quickly, you decide to walk along the diagonal of the field. What is the angle of your path, with respect to the 50-m side, to the nearest degree?

26. In the triangle, $BC = 14$ cm and $\tan B = \frac{13}{14}$. Determine the area of $\triangle ABC$, to the nearest square centimetre.

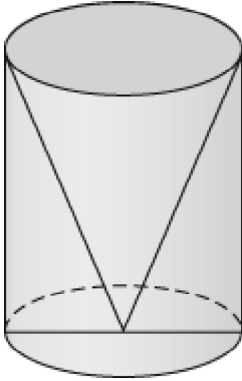


27. In the triangle, $BC = 12$ cm and $\tan B = 0.6667$. Determine the area of $\triangle ABC$, to the nearest square centimetre.



Level 7-8 Questions

28. A cone just fits inside a can. The diameter of the can is 8.4 cm and the height is 10.8 cm. Determine the angle between the vertex of the cone and the bottom of the can, to the nearest tenth of a degree.



29. An Airbus A320 aircraft is cruising at an altitude of 10000 m. The aircraft is flying in a straight line away from Monica, who is standing on the ground. Monica observes that the angle of elevation of the aircraft changes from 70° to 36° in one minute. What is the cruising speed of the aircraft, to the nearest kilometre per hour?