

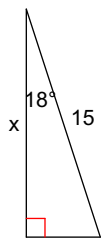
Geometry Homework

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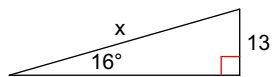
Trig Review (TR1)

Find the missing side. Round to the nearest tenth.

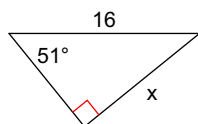
1)



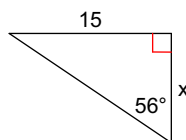
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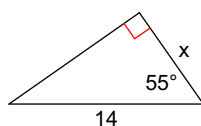
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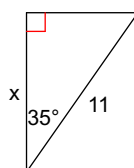
4)



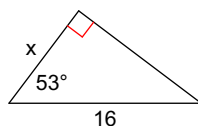
5)



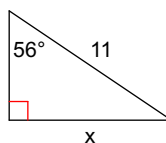
6)



7)

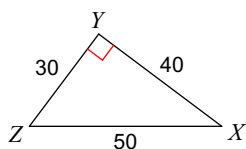


8)

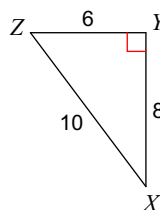


Find the ratio in fraction form, decimal and the degree.

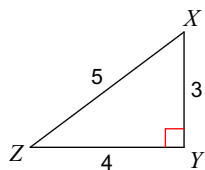
9)  $\sin X$



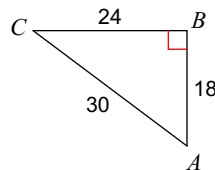
10)  $\cos X$



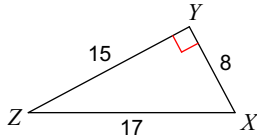
11)  $\cos Z$



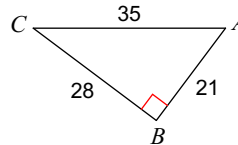
12)  $\cos C$



13)  $\tan X$



14)  $\tan A$



- 15) The height of a building is 250 feet. What is the angle of elevation from a point on the level ground 200 feet away from the building?
- 16) A 10 metre ladder is leaning against the side of a building. If the bottom of the ladder is 3 metres from the bottom of the building, find the angle of elevation the ladder makes with the building.
- 17) A kite string is 200 metres long. Find the height of the kite if the string makes an angle of  $38^\circ$  with the ground.
- 18) Cyndie is in a boat. The angle of elevation to the top of the cliff is  $26^\circ$ . If the cliff is 300 metres high, how far away from the base of the cliff is the boat?
- 19) A plane is flying at 6,000 metres. Erika sees the plane. If the angle of elevation from Erika's feet to the plane is  $16^\circ$ , how far is Erika from the plane?
- 20) The angle of elevation from the bottom of the lift to the top of Snow Bowl is  $33^\circ$ . If a skier rides 1,000 feet on this lift to the top, what is the vertical distance between the bottom of the lift and the top?
- 21) How far from the vertical wall of a building is the base of a 30 foot ladder which makes a  $75^\circ$  angle with the ground?

## Answers to Trig Review (TR1)

- |                    |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|
| 1) 14.3            | 2) 47.2           | 3) 12.4           | 4) 10.1           |
| 5) 8.0             | 6) 9.0            | 7) 9.6            | 8) 9.1            |
| 9) $\frac{3}{5}$   | 10) $\frac{4}{5}$ | 11) $\frac{4}{5}$ | 12) $\frac{4}{5}$ |
| 13) $\frac{15}{8}$ | 14) $\frac{4}{3}$ |                   |                   |

- 15) The angle of elevation is approximately 51 degrees.
- 16) The angle that the ladder makes with the building is approximately 73 degrees.
- 17) The kite is flying at an approximate height of 123.1 metres.
- 18) The boat is approximately 615.1 metres from the base of the cliff.
- 19) Erika is approximately 21,770.7 metres from the plane.
- 20) The vertical distance between the bottom of the lift and the top of the lift is approximately 544.6 feet.
- 21) The base of the ladder is approximately 7.8 feet from the base of the building.