Right Triangle Trigonometry

aka, Geometry

Solve for x.

Approximate your answer to the nearest tenths.

1.





2.























9. Determine the **height** of the building.

The angle of elevation to the sun is 52^{0} that casts a shadow of 120 ft. Determine the height of the building *h*. Approximate your answer to the nearest tenths.



10. Determine the **length** of the shadow.

The angle of elevation to the sun is 36° against a 40 m tall building. Determine the length of the shadow *L*. Approximate your answer to the nearest tenths.



11. Determine the **angle of elevation** of the sun.

A 44 ft tall building casts a shadow 62 ft shadow on the ground. Determine the angle of elevation to the sun θ^0 . Approximate your answer to the nearest tenths.



12. Determine the **height** of the tree.

The angle of elevation to the sun is 32^{0} and casts a shadow of 16 ft. Determine the height of the tree h. Approximate your answer to the nearest tenths.



13. Determine the **length** of the shadow.

The angle of elevation to the sun is 42^{0} against an 8 m tall tree. Determine the length of the shadow *L*. Approximate your answer to the nearest tenths.



14. Determine the **angle of elevation** of the sun.

A 20 ft tall tree casts a shadow 32 ft shadow on the ground. Determine the angle of elevation to the sun θ^0 . Approximate your answer to the nearest tenths.

