

## Shop Trig Overview 210

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Use the trig taught in this lesson to complete the following problems.

- 1.A boy flying a kite lets out 300 feet of string which makes an angle of  $38^\circ$  with the ground. Assuming that the string is straight, how high above the ground is the kite?
- 2.A ladder leaning against the wall makes an angle of  $74^\circ$  with the ground. If the foot of the ladder is 6.5 feet from the wall, how high on the wall is the ladder?
- 3.A straight road to the top of a hill is 2500 feet long and makes an angle of  $12^\circ$  with the horizontal. Find the height of the hill.
- 4.A 25 foot ladder leans against a building. The ladder's base is 13.5 feet from the building. Find the angle which the ladder makes with the ground.

5. In order to reach the top of a hill, which is 250 feet high, one must travel 2000 feet straight up a road. Find the number of degrees contained in the angle which the road makes with the horizontal.



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