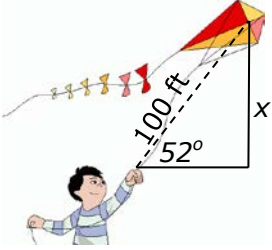
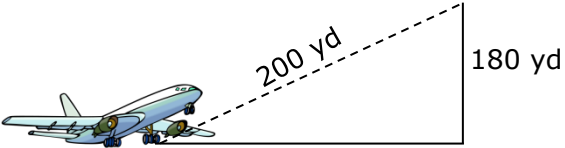
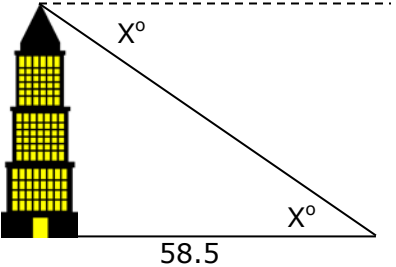
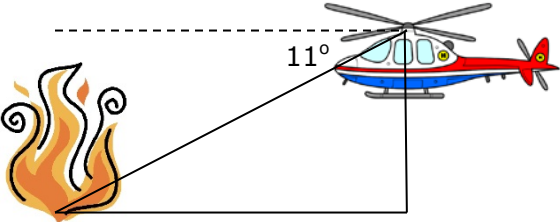
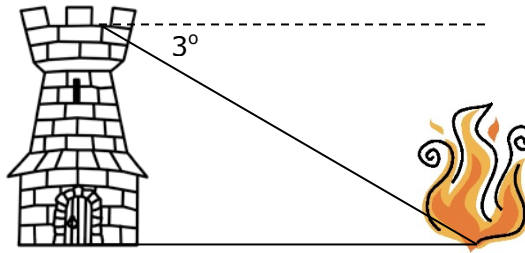


Word Problem	Picture	Solve!
<p>1. A man flies a kite with a 100 foot string. The angle of elevation of the string is 52°.</p> <p>What is the <u>height of the kite</u> in the sky?</p>		
<p>2. An airplane takes off 200 yards in front of a 180 yard building.</p> <p>Find the <u>angle of elevation</u> for the plane so it does not hit the building.</p>		
<p>3. A person stands on a <u>building that is 12.6 tall</u>. A phone is on the ground 58.5 meters away from the building.</p> <p>Find the <u>angle of depression</u> from your eyes to the object.</p>		
<p>4. The pilot of a helicopter sees a fire at an angle of depression of 11°. The helicopter's <u>altitude (or height) is 1700 feet</u>.</p> <p>What is the <u>horizontal distance</u> from the helicopter to the fire?</p>		

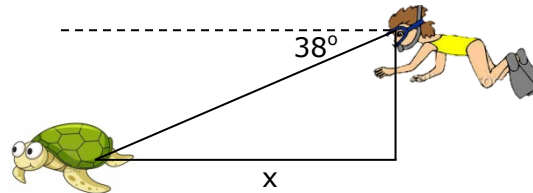
5. Smokey the bear is in a **140 foot** observation **tower** and sees a fire! The angle of depression to the fire is 3° .

Find the **horizontal distance** from the tower to the fire.



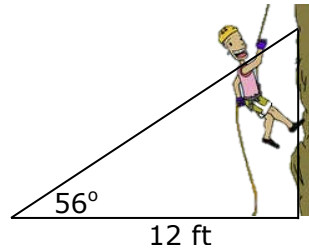
6. Ada is snorkeling and sees a turtle on the ocean floor at an angle of depression of 38° . She is **14 feet above** the ocean floor.

How far from the turtle is she?



7. Alex is standing 12 feet from a rock-climbing wall. When he looks up to see his friend, the angle of elevation is 56° .

How **high up the wall** is his friend?



8. An observer in a hot-air balloon sees a building **that is 50m away**. The balloon has a height of 165m.

What is the **angle of depression** from the balloon to the building?

