

OLD

Trigonometry Worksheet

For each problem: 1) Sketch a diagram.

2) Set up the equation.

3) Solve (round to the nearest tenth)

1) The angle of elevation from a ship to the top of a 70-foot lighthouse on the coast measures 26 degrees. How far from the coast is the boat?

2) The diagonal of a rectangle is 6 inches long. It makes an angle of 55 degrees with the side of the rectangle. Find the dimensions of the rectangle.

3) Two sides of a triangle measure 8 inches and 11 inches. The included angle measures 34 degrees. Find the measure of the altitude to the 11 inch side.

4) A kite is flying at the end of a 150 foot string. The string makes an angle of 75 degrees with the ground. How high above the ground is the kite?

5) A 15m pole is leaning against the wall. The foot of the pole is 10m from the base of the wall. Find the measure of the angle that the pole makes with the ground.

6) A small airplane climbs at an angle of 8° with the ground. Find the horizontal distance it has flown when it reaches an altitude of 800m.

7) A cliff is 100m above sea level. From the cliff, the angle of depression to a boat below is 58° . How far is the boat from the base of the cliff?

8) A Martian at the top of a 25m building spies a car at a 48° angle of depression. How far does he have to shoot his ray-gun to hit the car?

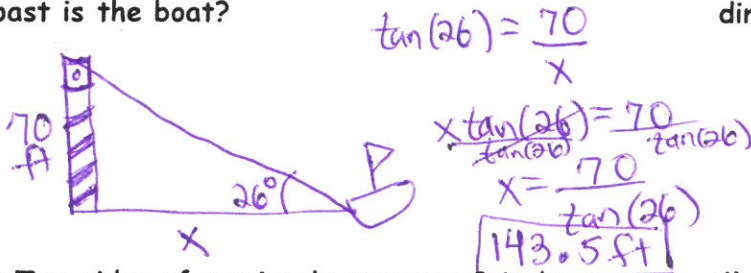
Trigonometry Worksheet

For each problem: 1) Sketch a diagram.

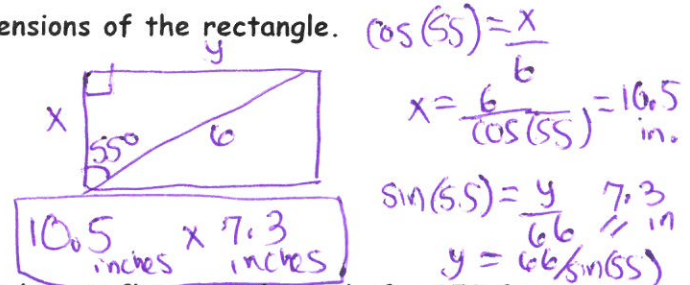
2) Set up the equation.

3) Solve (round to the nearest tenth)

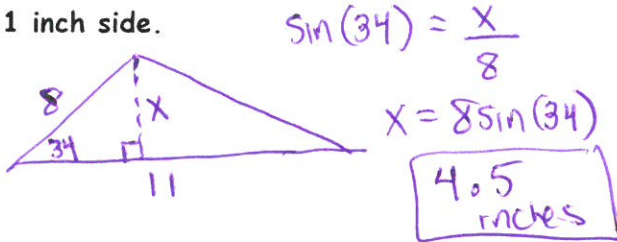
1) The angle of elevation from a ship to the top of a 70-foot lighthouse on the coast measures 26 degrees. How far from the coast is the boat?



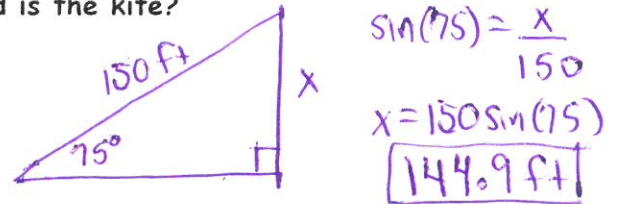
2) The diagonal of a rectangle is 6 inches long. It makes an angle of 55 degrees with the side of the rectangle. Find the dimensions of the rectangle.



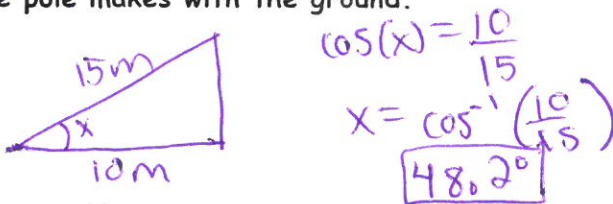
3) Two sides of a triangle measure 8 inches and 11 inches. The included angle measures 34 degrees. Find the measure of the altitude to the 11 inch side.



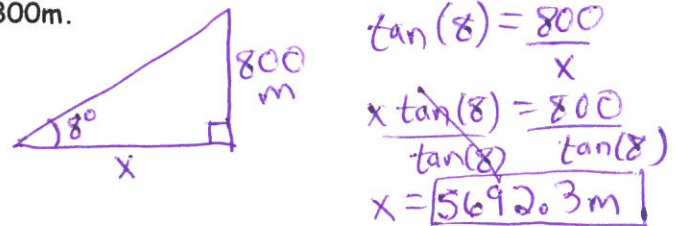
4) A kite is flying at the end of a 150 foot string. The string makes an angle of 75 degrees with the ground. How high above the ground is the kite?



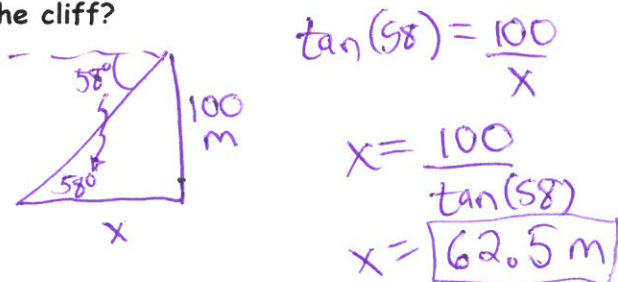
5) A 15m pole is leaning against the wall. The foot of the pole is 10m from the base of the wall. Find the measure of the angle that the pole makes with the ground.



6) A small airplane climbs at an angle of 8 degrees with the ground. Find the horizontal distance it has flown when it reaches an altitude of 800m.



7) A cliff is 100m above sea level. From the cliff, the angle of depression to a boat below is 58 degrees. How far is the boat from the base of the cliff?



8) A Martian at the top of a 25m building spies a car at a 48 degree angle of depression. How far does he have to shoot his ray-gun to hit the car?

