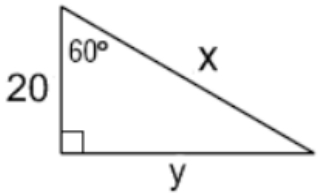
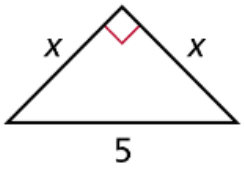
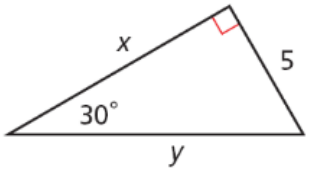
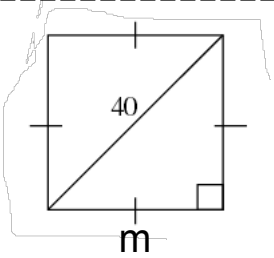
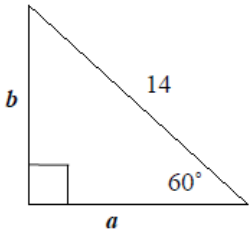
Find variables

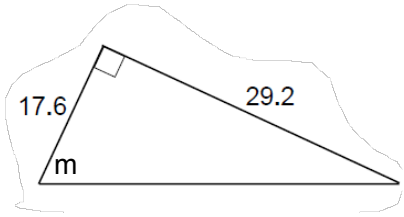


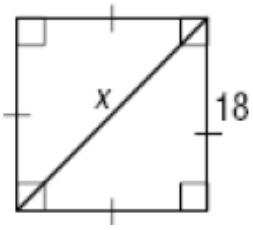




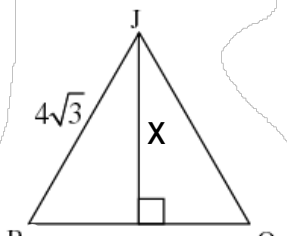


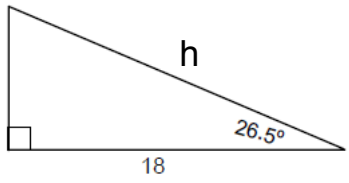


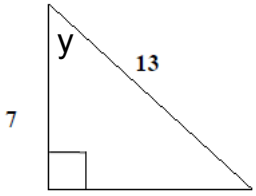




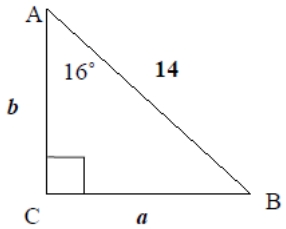
ΔRJQ is equilateral.

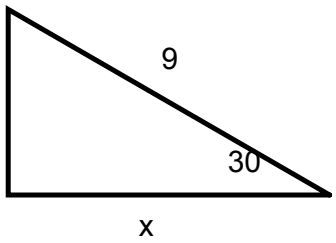


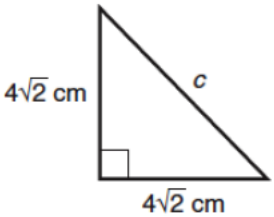


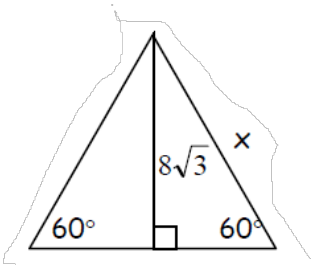


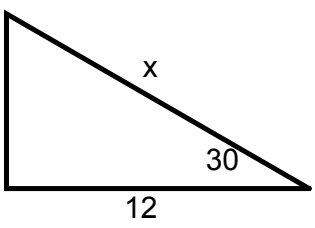
perimeter?











Anna has let out 50 meters of kite string when she observes that her kite is directly above Emily. If Anna is 35 meters from Emily, how high is the kite?

A man estimates that the angle of elevation of the top of a tree is 38 degrees. He then takes 53 paces to get to the tree. He reckons each pace to be about one metre. What will he then work out the height of the tree to be?

A kite-string has a total length of 75 metres. Calculate the height at which the kite must be flying when the string is fully out and is making an angle 37 degrees with the level ground.

A guy wire is 14 m long. It is attached to a TV tower 12 m high.
The guy wire is fastened to a stake in the ground.
How far is the stake from the base of the TV tower?

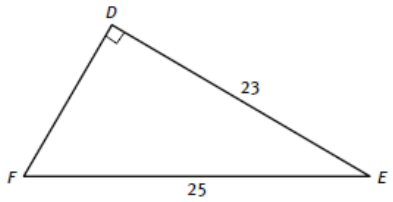
A ladder leaning against a house makes an angle of 30° with the ground. The foot of the ladder is 7 feet from the foot of the house. How long is the ladder?

Find the length of the side of an equilateral triangle that has an altitude length of $11\sqrt{3}$ feet.

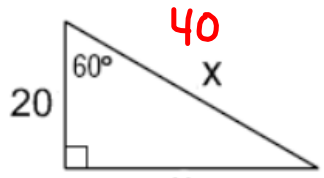
A person at the top of a cliff 100 feet tall sees Gilligan's boat. His sighting of the boat is at an angle of depression of 10°. How far is the boat from the base of the cliff?

A 32 in. bat is leaning against a fence. If the bat is 15 in. away from the base of the fence, what angle is formed between the ground and the bat?

Find the missing sides and angles for the triangle shown.

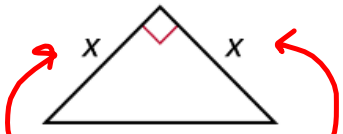


Find variables

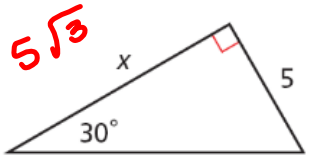


40

$20\sqrt{3}$

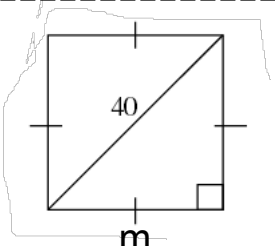


$\frac{5}{2}\sqrt{2}$

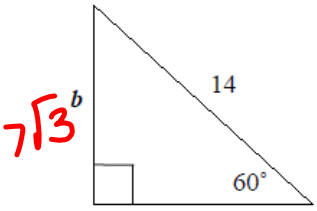


$5\sqrt{3}$

10

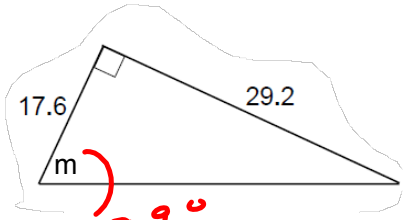


$20\sqrt{2}$

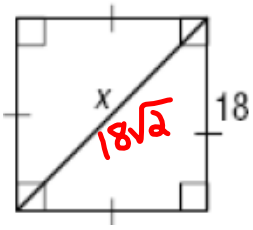


$7\sqrt{3}$

7

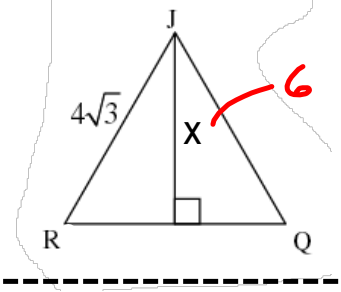


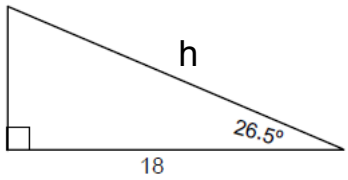
58.9°



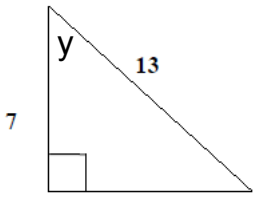
$18\sqrt{2}$

ΔRJQ is equilateral.





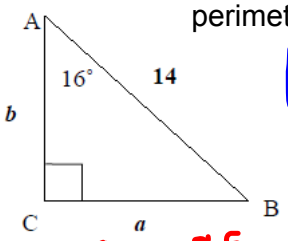
20 ish



57.4°

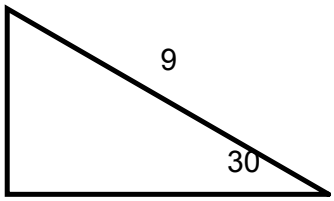
perimeter?

31.3

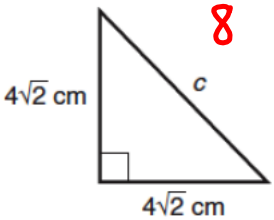


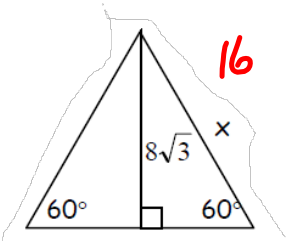
a=3.85

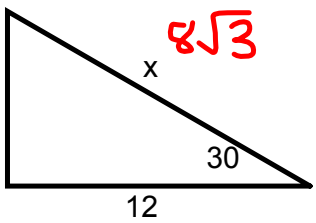
b=13.46



$\frac{9\sqrt{3}}{2}$







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35.7

A man estimates that the angle of elevation of the top of a tree is 38 degrees. He then takes 53 paces to get to the tree. He reckons each pace to be about one metre. What will he then work out the height of the tree to be?

41.4

A kite-string has a total length of 75 metres. Calculate the height at which the kite must be flying when the string is fully out and is making an angle 37 degrees with the level ground.

45.1

A guy wire is 14 m long. It is attached to a TV tower 12 m high. The guy wire is fastened to a stake in the ground. How far is the stake from the base of the TV tower?

7.2

A ladder leaning against a house makes an angle of 30° with the ground. The foot of the ladder is 7 feet from the foot of the house. How long is the ladder?

8.08

Find the length of the side of an equilateral triangle that has an altitude length of $11\sqrt{3}$ feet.

22

A person at the top of a cliff 100 feet tall sees Gilligan's boat. His sighting of the boat is at an angle of depression of 10°. How far is the boat from the base of the cliff?

568

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62

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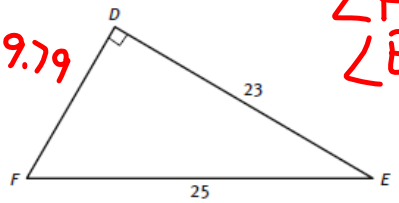

9.79

$\angle F = 67°$

$\angle E = 23°$