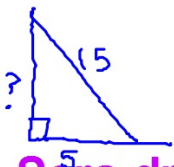


1) Dylan has a 15 foot ladder. He placed it 5 feet from the base of the house and then leaned the ladder against the house. About how far up the house does the ladder reach?

2) Sara draws a rectangle with a length of 78 inches and a width of 39 inches. She draws a diagonal line from one corner to the other. Approximately how long is the diagonal line? (Round to the nearest inch)

3) A rectangular television screen has a diagonal measurement of 52 inches and a width of 32 inches. What is the approximate length of the television screen?

1) Dylan has a 15 foot ladder. He placed it 5 feet from the base of the house and then leaned the ladder against the house. About how far up the house does the ladder reach?



$$a^2 + b^2 = c^2$$

$$a^2 + 5^2 = 15^2$$

$$a^2 + 25 = 225$$

$$a^2 = 200$$

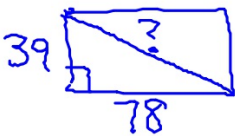
$$\sqrt{a^2} = \sqrt{200}$$

$$a = 14.14$$

$$a = 14.1$$

14.1 ft

2) Sara draws a rectangle with a length of 78 inches and a width of 39 inches. She draws a diagonal line from one corner to the other. Approximately how long is the diagonal line? (Round to the nearest inch)



$$a^2 + b^2 = c^2$$

$$39^2 + 78^2 = c^2$$

$$1521 + 6084 = c^2$$

$$7605 = c^2$$

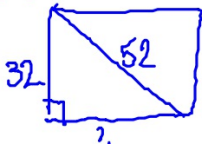
$$\sqrt{7605} = \sqrt{c^2}$$

$$87.20 = c$$

$$87.2 = c$$

87 inches

3) A rectangular television screen has a diagonal measurement of 52 inches and a width of 32 inches. What is the approximate length of the television screen?



$$a^2 + b^2 = c^2$$

$$a^2 + 32^2 = 52^2$$

$$a^2 + 1024 = 2704$$

$$a^2 = 1680$$

$$\sqrt{a^2} = \sqrt{1680}$$

$$a = 40.98$$

41 inches