Solving Applied Problems

A 15 foot piece of wood is cut into two pieces. The length of the second piece is 6.25 feet shorter than the first. What is the length of both pieces?

Answer:

A salesperson earns $1200 per month and a 15% commission on her total sales. If she earned $3000 last month, what was the amount of her sales?

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Answer:

Piece one = x
Piece two = x - 6.25

Total = Piece 1 + Piece 2
15 = x + (x - 6.25)
15 = 2x - 6.25
21.25 = 2x
10.625 = x

Side one = 10. 625 ft
Side two = 10.625 - 6.25 = 4.375 ft

Check: 10.625 + 4.375 = 15 ft

A salesperson earns $1200 per month and a 15% commission on her total sales. If she earned $3000 last month, what was the amount of her sales?

Answer:

x = total sales
0.15x is the amount of commisson from total sales

3000 = 1200 + 0.15x
1800 = 0.15x
$12,000 = x

Her total sales for the month was $12,000.