

10. Find the cost of 500 scantlings 18 ft. long 4 in. wide, and 3 in. thick at \$35 per M.

Carpeting

Carpet is sold by the linear yard and is usually 27 or 36 in. wide. The number of yards required for a given room depends on the way the strips are to run, lengthwise or crosswise, and the amount of waste in matching. A carpet dealer will not cut a strip lengthwise, and therefore a fractional part of a strip cannot be bought.

Example:

A room is 18 yards long and 13 yards wide. Determine the number of strips (*a*) running lengthwise, (*b*) running crosswise, the carpet being 36 inches wide. Also determine the number of yards required. Draw a diagram.

There will be 13 strips 18 yards long = 234 yards

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Suppose the carpet was 27 inches wide, determine the number of strips in each case and the number of yards of carpet required.

There will be $\frac{13 \times 36}{27} = 17\frac{1}{3}$ or 18 strips required, each 18 yards long.

There will be $\frac{18 \times 36}{27} = 24$ strips required, each 13 yards long.

What width of carpet will have to be turned under in each case?

EXERCISE

1. How many yards of carpet 27 in. wide will be required for rooms whose dimensions are:

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|-----------------------|-----------------------|
| (a) 27 ft. by 21 ft.? | (c) 18 ft. by 24 ft.? |
| (b) 15 ft. by 12 ft.? | (d) 26 ft. by 36 ft.? |