

On an architect's blueprint, 1 inch corresponds to 4 feet. How long is a wall represented by 15 inches on a blue print.

Step 1: set up a proportion

$$\frac{1}{4} = \frac{15}{x}$$

$$\frac{\text{blueprint}}{\text{actual}} = \frac{\text{blueprint}}{\text{actual}}$$

Step 2: solve proportion by cross multiplying

$$1 \cdot x = 15 \cdot 4$$

$$\frac{1x}{1} = \frac{60}{1}$$

Step 3: Divide by the number in front of the variable

$$x = 60$$

Therefore, a 15 inch line on the blue print represents a 60ft wall