

1 Task

The length of a rectangular portrait is 1.5 time the width. The perimeter is 10 feet. What is the length of the portrait?

2 Solution

Let w to be a width of the portrait and l - the length. From the task formulation we see, that $l = 1.5w$. The perimeter can be calculated as

$$P = 2w + 2l = 2(w + l) = 2(w + 1.5w) = 2 * 2.5w$$

As we know, $P = 10$. So,

$$5 * w = 10$$

$$w = 2$$

$$l = 1.5 * w = 3$$

3 Answer

The length of the portrait is 3 feet.