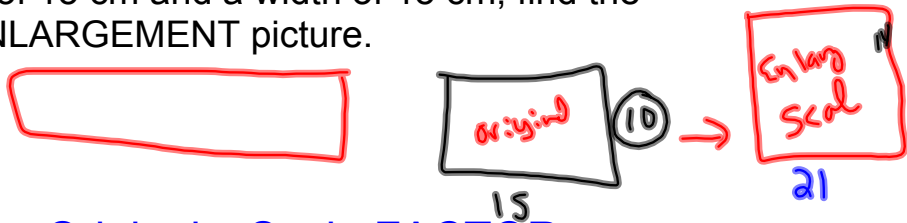


1) Scale Factor is $\frac{7}{5}$

A picture has length of 15 cm and a width of 15 cm, find the dimensions of the ENLARGEMENT picture.

actual... Original
enlarge/reduction.....scale →



Scale Length = Original x Scale FACTOR

$$\begin{aligned} \text{Scale Length} &= 15\text{cm} \times \frac{7}{5} \\ &= 15\text{cm} \times (1.4) \\ &= 21\text{cm} \end{aligned}$$

$$\begin{aligned} \text{Scale width} &= 10 \times \frac{7}{5} \\ &= 10 \times 1.4 \\ &= 14 \end{aligned}$$

2) The length of a ^{scale 1:2} model car is 21cm

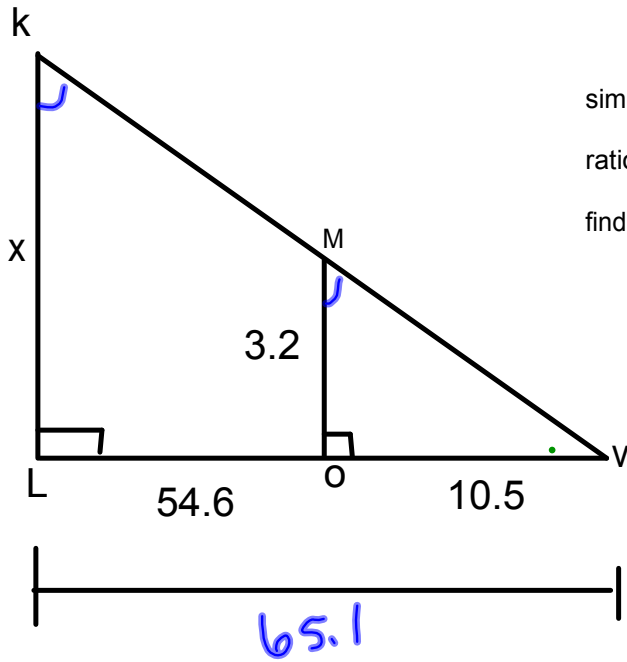
The scale factor is 0.5

What is the actual length of the car?
ans

original Length = Scale Length \div Scale FACTOR

$$= 21 \div 0.5$$

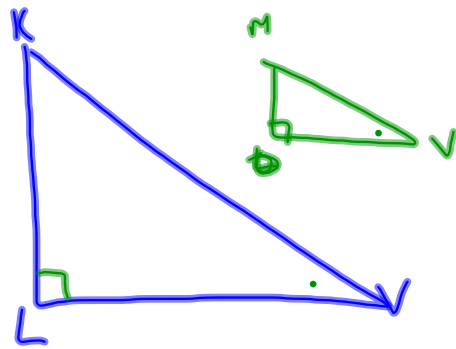
$$= 42 \text{ cm}$$



similarity statement

ratios

find x



$$KLV \sim MOV$$

$$\frac{KL}{MO} = \frac{LV}{OV} = \frac{KV}{MV}$$

$$\frac{x}{3.2} = \frac{65.1}{10.5}$$

$$10.5x = 65.1(3.2)$$

$$\frac{10.5x}{10.5} = \frac{208.32}{10.5}$$

$$x = 19.84$$

$$\text{Scale factor} = \frac{\text{scale length}}{\text{Original Length}}$$

$$\text{Scale Length} = \text{Original} \times \text{Scale FACTOR}$$

$$\text{original Length} = \text{Scale Length} \div \text{Scale FACTOR}$$

Quiz Time