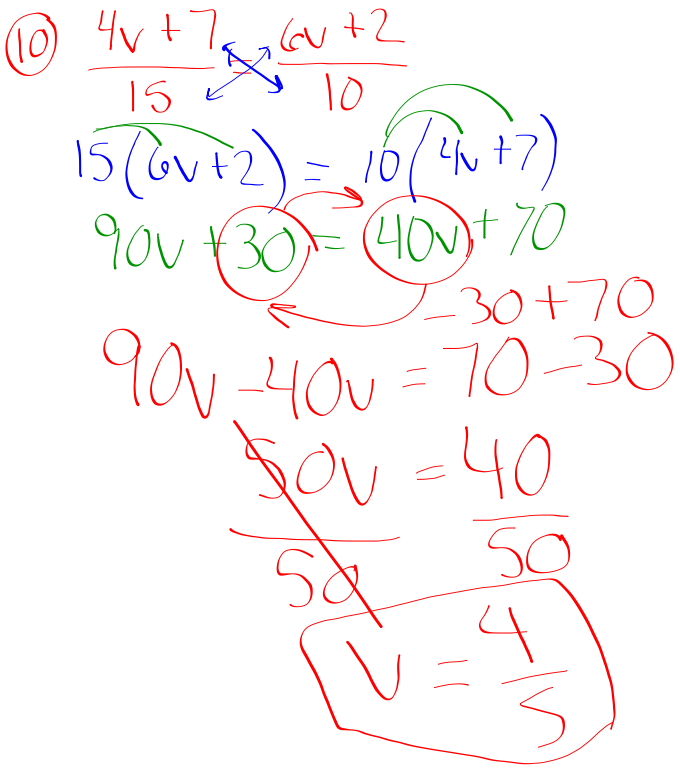
Homework Questions



Clear Learning Target

You will be able to use proportions to solve real world problems relating to scale and rate.

REAL-WORLD PROPORTIONS

RATE

Ratio of two measurements with different units

$\frac{mi}{hr}$ $\frac{price}{oz}$

Example #1: *It takes 7 minutes for Melanie to walk around the gym track twice. At this rate, how many times can she walk around the track in a half hour?*

MIN → $\frac{7}{2} = \frac{30}{x}$

LAP →

$\frac{60}{7} = \frac{7x}{7}$

$8.6 = x$

laps

You Try!

The B-Clean Car Wash washed 128 cars in 3 hours. At that rate, how many cars can they wash in 8 hours?

CARS / HOURS $\frac{128}{3} = \frac{x}{8}$

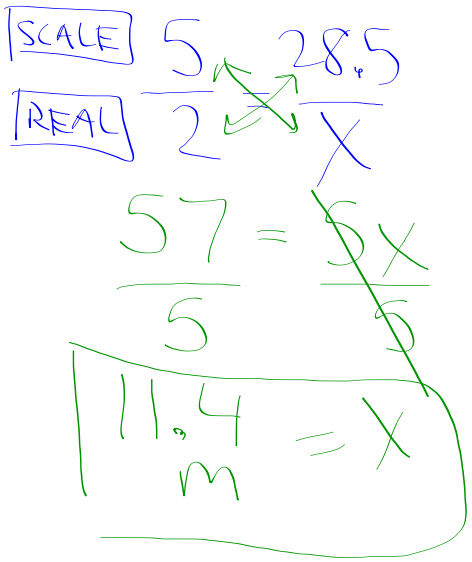
$\frac{3x}{3} = \frac{1024}{3}$

$x = 341$ cars

SCALE

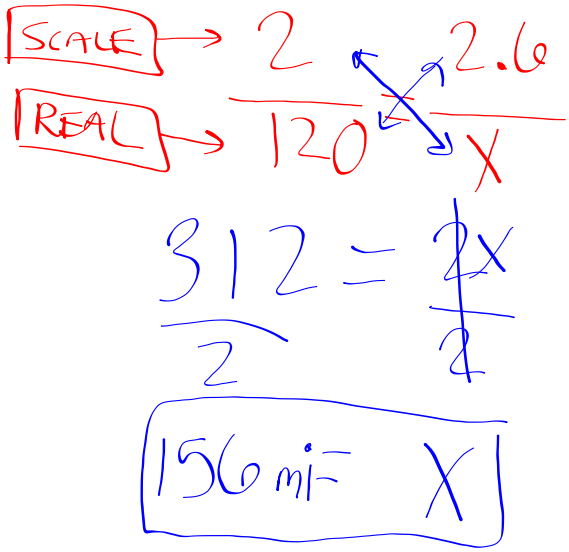
The relationship between the measurements on a drawing or model and the measurements of the real object

Example #2: *On a model airplane, the scale is 5 centimeters = 2 meters. If the model's wingspan is 28.5 centimeters, what is the actual wingspan of the full size plane?*



You Try!

On a map of Florida, the distance between Jacksonville and Tallahassee is 2.6 centimeters. If 2 centimeters = 120 miles, what is the distance between the two cities?



EXIT TICKET!

1. Haley ran the first 6 miles of a marathon in 58 minutes. If she is able to maintain the same pace, how long will it take her to finish the 26.2 miles?

2. In a road atlas, the scale for the map of Connecticut is 5 inches = 41 miles. What is the distance in miles represented by 2.5 inches on the map?