Do Now:

Describe and correct the error in solving the proportion.

$$\frac{3}{9} \xrightarrow{} = \xrightarrow{} \frac{12}{m}$$

9m = 3 * 12

9m = 36

m = 4

$3m = 9(12)$

$3m = \dfrac{108}{3}$

$\boxed{M = 36}$

---

⑭

$$\frac{39}{13} = \frac{9}{d}$$

7.2 Writing and Solving Proportions

7.RP

- SWBAT write and solve proportions.
- SWBAT apply proper techniques to find measures.

Calculators: Yes

The dimensions of a **scale model** are proportional to the dimensions of the actual object.

The scale is written as a ratio.

$$\vdash\!\!\!\frac{100 \text{ miles}}{1 \text{ in.}}\!\!\!\dashv$$

Strawberry Point, Iowa, has a strawberry sculpture that is 15 feet tall. If the scale of this model is 10 feet to 1 inch, how tall was the actual strawberry?
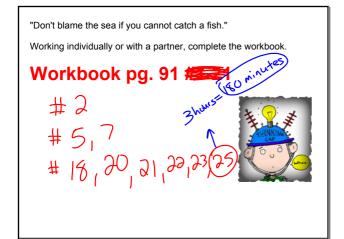
Scale   Actual

$$\frac{10 \text{ feet}}{1 \text{ in}} \diagdown\!\!\!\diagup \frac{15 \text{ ft}}{x \text{ in.}} \quad \begin{array}{l}\text{Sculpture}\\[4pt]\text{Real life}\end{array}$$

$10(x) = 15(1)$

$\dfrac{10x}{10} = \dfrac{15}{10}$

$x = 1.5$

(The actual strawberry was 1.5 inches tall.)

An architecture draws a blueprint for the front of a townhouse. On the blueprint, the townhouse is 50 centimeters wide. If the scale of the blueprint is 1 centimeter to 0.5 meter, how wide is the front of the townhouse?

Scale   Actual

$$\frac{1 \text{ cm}}{0.5 \text{ m}} \diagdown\!\!\!\diagup \frac{50 \text{ cm}}{x \text{ m}} \quad \begin{array}{l}\text{(Model)}\\[4pt]\text{(Real life)}\end{array}$$

$x(1) = 0.5(50)$

$\boxed{x = 25}$

The townhouse is 25 m wide.

"Don't blame the sea if you cannot catch a fish."

Working individually or with a partner, complete the workbook.

Workbook pg. 91 ~~#1~~

2

5, 7

18, 20, 21, 22, 23, 25

3 hours = 180 minutes

Answers to the Workbook

Exit Pass 7.2

On a scale on 1 to 10 (1 being the lowest and 10 being the highest), how confident are you with writing and solving proportions?

Homework

No Homework!