

HW review - #18, p.171

$$\cancel{(14)}(b) \frac{18}{\cancel{14}} = \frac{b+2}{\cancel{b}} (14) \cancel{(b)}$$

$$18b = 14(b+2)$$

$$18b = 14b + 28$$

$$4b = 28$$

$$b = 7$$

Ratios & Proportions

Ratio — comparison between two numbers

$$\frac{5}{6}$$

$$5:6$$

$$5 \text{ to } 6$$

Proportion — comparison between two ratios
in the form of an equation

$$\frac{5}{6} = \frac{17}{x}$$

$$\frac{x}{31} = \frac{4}{7}$$

Percentages

• A ratio between a number and 100

$$45\% = \frac{45}{100} = 45 \div 100 = 0.45$$

$$79.16428\% = \frac{79.16428}{100} = 79.16428 \div 100 = 0.7916428$$

$$\frac{4}{7} \quad \frac{6}{11} \quad \frac{3}{13} \quad \frac{4}{5}$$

$$\begin{aligned} \frac{4}{7} &= \frac{x}{100} \\ 400 &= 7x \\ 57.1428 &= x \end{aligned}$$

.55
||
55%

42% of 15 is:

$$\begin{aligned} \frac{42}{100} &= \frac{x}{15} \quad \text{or} \quad 42\% \cdot 15 = \\ 630 &= 100x \\ x &= 6.3 \end{aligned}$$

0.42 · 15 = 6.3

1. Finish/turn in quiz

2. Homework:

p. 179 4-28 (even), 33, 35, 37

p. 182 7-45 (all)

p. 197 4-15 (all)

p. 217 1-96 (all)

p. 422 1-4, 316 (all)

→ Angie only