Percent Proportion: compares the part (is) to the whole / total value (of)

part → is / of = p / 100 ← % (whole)

Note: Use a variable for the missing value!
Solve using cross products (heart method)

Remember: percent (divide by 100) "per" divide "cent" hundred

Ex. 1 Find each number. Round to the nearest tenth, if necessary.

A) (what percent) of 24 is 18 ? (p)

$\frac{is}{of} = \frac{p}{100}$

$\frac{18}{24} = \frac{p}{100}$ OR $\frac{3}{4} = \frac{p}{100}$

$100 \cdot 18 = 24p$ $\quad 100 \cdot 3 = 4p$

$\frac{1800}{24} = \frac{24p}{24}$ $\quad \frac{300}{4} = \frac{4p}{4}$

OR $\frac{18}{24} = \frac{p}{100}$

$\frac{25\ 100 \cdot 18^{3}}{24_{4_1}} = \frac{24p}{24}$

$p = 75\%$

B) What number (x) is (30 %) of 150?

$\frac{x}{150} = \frac{30}{100}$

$100x = 150 \cdot 30$

$\frac{100x}{100} = \frac{4500}{100}$

$x = 45$

C) 12 is (80%) of what num (x)

$\frac{12}{x} = \frac{80}{100}$

$100 \cdot 12 = 80x$

$\frac{1200}{80} = \frac{80x}{80}$

$15 = x$

$x = 15$

OR $\frac{12}{x} = \frac{80}{100}$

$\frac{10^{3} \cdot 100^{5}}{80_{4_1}} = \frac{80x}{80}$

D) Sally read the nutrition facts on a cereal box. Each cup provides 7% of daily recommended value of potassium. 1 cup of 260 mg of potassium. What is the daily recommended value?

260 mg is 7% of what number (x) ?

$\frac{260}{x} = \frac{7}{100}$

$260 \cdot 100 = 7x$

$\frac{26000}{7} = \frac{7x}{7}$

$x = 3,714.\overline{285714}$

$x \approx 3,714.3$ mg

∴ The daily recommended value of potassium is approximately 3,714.3 mg.

Homework: GM7 pg 335 (2-24 even)