

15th November

Completed Exercises from the lecture on
< Percentages >

2. Hard, Pages 2-3 ;

Can be found below.

Hard

- (1) 954943a4 MULTIPLE CHOICE One answer only

Jennifer bought a box of Crunchy Grain cereal. The nutrition facts on the box state that a serving size of the cereal is $\frac{3}{4}$ cup and provides 210 calories, 50 of which are calories from fat. In addition, each serving of the cereal provides 180 milligrams of potassium, which is 5% of the daily allowance for adults. If p percent of an adult's daily allowance of potassium is provided by x servings of Crunchy Grain cereal per day, which of the following expresses p in terms of x ?

- a. $p = 0.5x = 0.5$
 b. $p = (0.05)^x = 0.05$
 c. $p = 5x = 5$
 d. $p = (1.05)^x = 1.05$

$\frac{3}{4}$ cup $\left\{ \begin{array}{l} 50 \text{ cal fat} \\ 160 \text{ cal other} \end{array} \right.$

\downarrow

$180 \text{ mg Pot} = 5\% \cdot da$

$$da = 3600$$

$$\frac{1}{48}x = p$$

$$x \cdot \frac{3}{4} \text{ cup} = \frac{p}{100} \cdot 3600$$

$$x \cdot \frac{3}{4} \times \frac{1}{36}$$

(3) 65c49824 SHORT ANSWER Case-Insensitive

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A school district is forming a committee to discuss plans for the construction of a new high school. Of those invited to join the committee, 15% are parents of students, 45% are teachers from the current high school, 25% are school and district administrators, and the remaining 6 individuals are students. How many more teachers were invited to join the committee than school and district administrators?

- 15% parents
- 45% teachers $\rightarrow 18$
- 25% admins $\rightarrow 10$
- 6 students ..

$$S \% \text{ students}, S = 15\%$$

$$100\% = S\% + 15\% + 45\% + 25\%$$

$$15\% \rightarrow 6 \text{ members}$$

$$100\% \rightarrow 40 \text{ members}$$