

Unit 4 Embedded Assessment p. 245 "A Summer Job"

*Wendy summer job, 5 days/week.

(1) option 1: \$62/day = \$310/week

option 2: \$304/week

option 1 is better.

$$\frac{62}{1 \text{ day}} = \frac{x}{7 \text{ days}}$$

$$x = 310$$

(2) For 4 weeks?

$$\frac{310}{1 \text{ wk}} = \frac{x}{4 \text{ weeks}}$$

$$\frac{1x}{1} = \frac{1240}{1}$$

$$x = 1240$$

(3) 1 gallon Green
3 gallons White

(3a) 1:3, $\frac{1}{3}$, 1 to 3

(3b) 1 gallon Green
+ 3 gallons White

4 total gallons

(4) Need 12 gallons

(4a) Green $\frac{1}{3}$ } 4 total gallons.
White $\frac{1}{3}$

Green $\frac{1}{4}$
Total

$$\frac{1}{4 \text{ Tot.}} = \frac{x}{12 \text{ Tot.}}$$

$$\frac{4x}{4} = \frac{12}{4}$$

x = 3 gallons
Green

White $\frac{3}{4}$
Total

$$\frac{3}{4} = \frac{x}{12}$$

$$\frac{4x}{4} = \frac{36}{4}$$

x = 9 gallons
White

9+3=12 tot.
gallons

(4b) 4 quarts
1 gallon

$$\frac{4 \text{ q.}}{1 \text{ g.}} = \frac{x \text{ q.}}{12 \text{ g.}}$$

$$x = 48 \text{ quarts}$$

- (5) How many gallons of green if have 10 gallons white?

$$\frac{1 \text{ Gr}}{3 \text{ Wh.}} = \frac{x}{10}$$

$$\frac{3x}{3} = \frac{10}{3}$$

$$x = 3.33$$

$3\frac{1}{3}$ gallons of green

- (6) How many gallons of white to mix with .5 gallon of green?

$$\frac{1 \text{ G}}{3 \text{ W}} = \frac{.5 \text{ G}}{x}$$

$$x = 1.5 \text{ gallons of white}$$

- (7) Wendy mixed 2 gallons green and 3 gallons of white.

(7a) $\frac{1 \text{ Gr}}{3 \text{ Wh.}} \xrightarrow{\text{more green}} \frac{2 \text{ Gr}}{3 \text{ Wh.}}$
 $\xrightarrow{\text{same}}$

Color will be darker.

(7b) $\frac{1 \text{ Gr}}{3 \text{ Wh.}} \xrightarrow{\times 2} \frac{2 \text{ Gr}}{6 \text{ Wh.}}$
 $\xrightarrow{\times 2}$

Needs 6 more gallons of white.