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CHAPTER 15.4 Quiz

- (1) How many pounds of nuts selling for \$6 per lb and raisins selling for \$3 per lb should a person combine to obtain 210 lb of a trail mix selling for \$4 per lb?

$$x + y = 210 \quad x = 210 - y$$

$$6x + 3y = 4(210) = 840$$

$$6(210 - y) + 3y = 840$$

$$1260 - 6y + 3y = 840$$

$$-3y = 840 - 1260 = -420$$

$$y = \boxed{140 \text{ lb of raisins}}$$

$$x + y = 210$$

$$x + 140 = 210$$

$$x = \boxed{70 \text{ lb of nuts}}$$

④ A baseball team has home games on Wednesday and Sunday. The two games together earn \$4667.50 for the team. Wednesday game generates \$907.50 less than Sunday game. How much money was taken in at each game?

$$W + S = 4667.50$$

$$W = S - 907.50$$

$$3S - 907.50$$



$$\frac{2W}{2} = \frac{3760}{2} = 1880 \text{ Wednesday}$$

$$\begin{array}{r} 4667.50 \\ - 1880.00 \\ \hline \end{array}$$

$$\boxed{2787.5} \text{ Sunday}$$