

1) The early 1900's witnessed the largest Great White Shark ever caught. It was 37 feet long and it weighed 24,000 lbs. At that rate, a 10,000 pounder would be how long? (Answer as mixed #.) (Source: <http://www.corsinet.com/trivia/a-triv.html>)

$$\frac{\text{ft} \rightarrow 37}{\text{lbs} \rightarrow 24,000} = \frac{x}{10,000}$$

$$\frac{37}{24,000} = \frac{x}{10,000}$$

$$\frac{37}{24,000} \times 10,000 = \frac{x}{10,000} \times 10,000$$

$$\frac{37 \times 10,000}{24,000} = x$$

$$\frac{370,000}{24,000} = x$$

$$\frac{185}{12} = x$$

$$15 \frac{5}{12} = x \text{ feet}$$

2) In 2013, out of about 70,000 college football teams, 254 NCAA student athletes were drafted to a pro team. If there are 1400 college football teams in a particular state, how many of them were drafted to a pro team? (Answer as a mixed #.) (Source: http://www.default/files/Probability-of-going-pro-methodology_L)

$$\frac{\text{total} \rightarrow 70,000}{\text{drafted} \rightarrow 254} = \frac{1400}{x}$$

$$\frac{70,000}{254} = \frac{1400}{x}$$

$$70,000x = 254 \cdot 1400$$

$$70,000x = 355,600$$

$$x = \frac{355,600}{70,000}$$

$$x = \frac{3556}{700}$$

$$x = \frac{127 \cdot 28}{25 \cdot 28}$$

$$x = \frac{127}{25}$$

$$x = 5 \frac{2}{25}$$

$$\text{or}$$

$$x \approx 5 \text{ drafted}$$

3) The common garden snail is actually the "fastest" of the land snails; in 5.1 minutes it can travel about 14 feet. How many minutes will it take to travel 21 feet? (Answer as a decimal.) (Source: <http://www.corsinet.com/trivia/a-triv.html>)

$$\frac{\text{minutes} \rightarrow 5.1}{\text{ft} \rightarrow 14} = \frac{x}{21}$$

$$\frac{5.1}{14} = \frac{x}{21}$$

$$5.1 \times 21 = 14x$$

$$107.1 = 14x$$

$$\frac{107.1}{14} = \frac{14x}{14}$$

$$7.65 = x$$

$$7.65 \text{ minutes}$$

4) Running 2 miles burns about 1300 calories. (180 lb. person running 12 minute miles) If a woman decides to burn up 2100 calories, how far should she run at this pace? (Answer as a mixed #, then round to the nearest whole #.) (Source: <http://www.nutristrategy.com/caloriesburned.htm>)

$$\frac{\text{miles} \rightarrow 2}{\text{calories} \rightarrow 1300} = \frac{x}{2100}$$

$$\frac{2}{1300} = \frac{x}{2100}$$

$$2 \times 2100 = 1300x$$

$$4200 = 1300x$$

$$\frac{4200}{1300} = \frac{1300x}{1300}$$

$$\frac{42}{13} = x$$

$$3 \frac{3}{13} = x$$

$$\text{or}$$

$$3 \approx x$$

$$3 \text{ miles}$$

5) Vacationing on the island of Oahu, Hawaii, you are staying in Waikiki. You plan to visit Hanauma Bay, a popular snorkeling spot. The scale on your map indicates that $\frac{1}{3}$ inches is equivalent to 1 mile on the road. If Hanauma Bay is 10 inches on the map, how far is it on the road? (Answer as improper fraction and mixed #.)

$$\frac{\text{inches} \rightarrow 10}{\text{miles} \rightarrow 1} = \frac{x}{1}$$

$$\frac{10}{1} = \frac{x}{1}$$

$$10 = x$$

$$x = 10 \text{ miles}$$

6) Planning a Big Lebowski movie party, your roommates realize that you have everything needed for White Russians* except Kahlua. According to the recipe, 1 drink requires $\frac{3}{4}$ ounce. The smallest bottle in the store is about 7 ounces. With this bottle, how many drinks could you make? (Answer as a mixed #.) (*White Russian is the signature drink in the movie.)

$$\frac{\# \text{ drinks} \rightarrow 1}{\text{oz Kahlua} \rightarrow \frac{3}{4}} = \frac{x}{7}$$

$$\frac{1}{\frac{3}{4}} = \frac{x}{7}$$

$$1 \cdot \frac{4}{3} = \frac{x}{7}$$

$$\frac{4}{3} = \frac{x}{7}$$

$$4 \cdot 7 = 3x$$

$$28 = 3x$$

$$\frac{28}{3} = x$$

$$9 \frac{1}{3} = x$$

$$9 \frac{1}{3} \text{ drinks}$$