



FAIR TRADE ALGEBRA

Name:

Date:

Complete the word problems below. Show your work.

1. A bag of Fair Trade chocolate chips contain 55% organic cocoa. If there are nine cups of chocolate chips in a bag, how many cups are organic cocoa?

$$9(.55) = 4.95$$

ANSWER = 4.95 cups are organic cocoa





2. During his shift, Travis can brew fifty cups of Fair Trade Coffee in three hours. At this rate, how many could he brew over an 8-hour shift? Is this realistic?

$$\frac{50}{3} = \frac{x}{8}$$

$$x = 133.3$$

ANSWER = He could brew approximately 133 cups of Fair Trade coffee over an 8-hour shift (this is likely not realistic as he would get tired and slow down the longer he worked)



3. When Nina first started making smoothies with Fair Trade bananas, it took her 8 minutes to make one smoothie. But after a while she got the hang of it and was able to make one in only 6 minutes. What was the percent decrease in the amount of time it took Nina to make a Fair Trade smoothie?

$$\frac{x}{100} = \frac{2}{8}$$

$$x = 25$$

ANSWER: There was a 25% decrease in the amount of time it took Nina to make a Fair Trade smoothie



4. In 2010, the corner store sold 1382 lip balms. The following year, 1256 lip balms were sold. In 2012, the store sold 262 fewer lip balms than in 2011. How many lip balms did they sell all three years combined?

$$1256 - 262 = 994 \text{ lip balms sold in 2012.}$$

$$1382 + 1256 + 994 = 3632$$

ANSWER = the corner store sold a total of 3,632 lip balms all three years combined





5. Anthony can make a bouquet of Fair Trade roses in 40 minutes. If he is already 80% done with a bouquet, how much longer should it take him to complete it?

$$\frac{80}{100} = \frac{x}{40}$$

$$x = 32$$

$$40 - 32 = 8$$

ANSWER: Anthony needs 8 more minutes to finish the bouquet

