

Flashcards: Proportions

Directions: Answer the following questions.

1. The ratio of happy people to sad people is 15 to 2. If there are 75 happy people, how many are sad?
2. The ratio of oranges to apples in the fruit salad is 3 to 2. If 9 apples are used, how many oranges should be used?
3. An exchange student from China will average \$80 in spending each month for the 6 months he is here. By the end of his visit, he has spent a total of 3276.45 Chinese yuan. What is 1 Chinese yuan worth in US dollars?
4. A model is a 1:250 replica of the real thing. If the model is 1.2 feet tall, what is the size of the real thing?

Answers:

1. Happy over sad equals 15 over 2 equals 75 over x. Cross multiply to get $15x = 150$. $x = 10$. There are 10 sad people.
2. Oranges over Apples equals 3 over 2 equals x over 9. Cross multiply to get $27 = 2x$. $13.5 = x$. 13.5 oranges should be used.
3. Eighty dollars times 6 equals 480 dollars spent. Dollars over yuan equals 480 over 3276.45 equals x over 1. Cross multiply to get $480 = 3276.45x$. $0.1465 = x$. 1 Chinese yuan is worth 0.1465 US dollars.
4. Model over real equals 1 over 250 equals 1.2 over x. Cross multiply to get $x = 300$. The real thing is 300 feet tall.