Name _____ Date_____

Solving Percent Problems

Jane paid $\$40$ for an item after she received a 20% discount. Jane's friend says this means that the original price of the item was $\$48$.

a. How do you think Jane's friend arrived at this amount?

b. Is her friend correct? Why or why not?

1. Mr. Yoshi has 75 papers. He graded 60 papers, and he had a student teacher grade the rest. What percent of the papers did each person grade?

2. Mrs. Bennett has graded 20% of her 150 students' papers. How many papers does she still need to finish grading?

Jane paid $\$40$ for an item after she received a 20% discount. Jane's friend says this means that the original price of the item was $\$48$.

a. How do you think Jane's friend arrived at this amount?

Jane's friend found that 20% of 40 is 8. Then she added $\$8$ to the sale price: $40 + 8 = 48$. Then she determined that the original amount was $\$48$.

b. Is her friend correct? Why or why not?

Jane's friend was incorrect. Because Jane saved 20%, she paid 80% of the original amount, so that means that 40 is 80% of the original amount.

The original amount of the item was $\$50$.

1. Mr. Yoshi has 75 papers. He graded 60 papers, and he had a student teacher grade the rest. What percent of the papers did each person grade?

   Mr. Yoshi graded 80% of the papers, and the student teacher graded 20%.

2. Mrs. Bennett has graded 20% of her 150 students' papers. How many papers does she still need to finish grading?

   Mrs. Bennett has graded 30 papers. $150 - 30 = 120$. Mrs. Bennett has 120 papers left to grade.