47. Ricky found a beetle that is one fourth $\left(\frac{1}{4}\right)$ the length of the fraction strips used in Problem 1.3.

a. How many beetle bodies, placed end to end, would have a total length equal to the length of a fraction strip?

b. How many beetle bodies, placed end to end, would have a total length equal to three fraction strips?

c. Ricky drew 13 paper beetle bodies, end to end, each the same length as the one he found. How many fraction strips long is Ricky's line of beetle bodies?

48. Rachel looked at the two ratios 25 : 30 and 250 : 300. In each ratio she noticed that the first and second numbers have a common factor.

a. What are some common factors of 25 and 30?

b. What are some common factors of 250 and 300?

c. Rachel says that the two numbers in a ratio will always have a common factor. Is she correct?

49. Abby looked at the same ratios (25 : 30 and 250 : 300). In these two equivalent ratios, she noticed that the first numbers have a common factor and the second numbers have a different common factor.

a. What are some common factors of 25 and 250?

b. What are some common factors of 30 and 300?

c. Abby says that the first numbers in two equivalent ratios will always have a common factor. Is she correct?

For Exercises 50 and 51, write a fraction to describe how much pencil is left, compared to a new pencil. Measure from the left edge of the eraser to the point of the pencil.

50.

51.