

Dividing Fractions

Error Analysis Extension Worksheet

Directions: Read each problem carefully. There is *at least* one error in each problem. Explain the error and how to correctly determine the solution.

- 1) You hit up the post-holiday sales and scored some chocolate for a great price. You decided to split $\frac{9}{10}$ of a pound evenly among your 5 friends. How much chocolate would each person get, assuming you're keeping an equal amount for yourself, too?

$$\frac{9}{10} \div \frac{6}{1} = \frac{9}{10} \times \frac{1}{6} = \frac{9}{16}$$

Each person would get $\frac{9}{16}$ pounds of chocolate.

- 2) A recipe calls for $\frac{2}{3}$ cup of flour. All Sam can find in their kitchen is the $\frac{1}{4}$ measuring cup! How many of the $\frac{1}{4}$ cups does Sam need to use in order to measure correctly?

$$\frac{2}{3} \div \frac{1}{4} = \frac{12}{2} = 6$$

Sam needs to use the $\frac{1}{4}$ cup 6 times to get to $\frac{2}{3}$ cup of flour.

- 3) The carpentry teacher asked you to cut one piece of wood that's $\frac{7}{8}$ m long, but you misheard her and accidentally cut it into 4 pieces. How long is each piece of wood?

$$\frac{7}{8} \div 4 = \frac{8}{7} \times \frac{4}{1} = \frac{32}{7} = 4\frac{5}{7}\text{m}$$

Each of the pieces is $4\frac{5}{7}$ m long.