Grade 4 Unit 7 worksheet: Making an equivalent fraction by multiplying

Name _____ Date _____ Period _____

1. Find the missing number.

(a) $\frac{1}{3} = \frac{\square}{12}$

(b) $\frac{4}{5} = \frac{\square}{10}$

(c) $\frac{1}{2} = \frac{\square}{100}$

(d) $\frac{5}{2} = \frac{\square}{8}$

(e) $\frac{3}{4} = \frac{6}{\square}$

(f) $\frac{1}{6} = \frac{2}{\square}$

(g) $\frac{9}{10} = \frac{90}{\square}$

(h) $\frac{7}{6} = \frac{14}{\square}$

2. Draw a strip cut into 5 equal parts and shade 2 of them. Then draw a line through the middle of every part, so each part becomes 2 smaller parts.

(a) How many small parts does the strip have now? How many are shaded?

(b) Write the shaded part as two equivalent fractions.

(c) Use your strip to explain why the top and the bottom were both multiplied by 2.

3. Priya cuts a sheet cake into 6 equal pieces and puts frosting flowers on 1 of them. More guests come, so Priya cuts every piece the same way until the cake has 12 equal pieces.

(a) Into how many smaller pieces was each piece cut?

(b) How many of the small pieces have flowers?

(c) Write the flower part of the cake as two equivalent fractions.

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4. Owen wants to write $\frac{2}{3}$ in twelfths. He writes $\frac{2}{3} = \frac{6}{12}$ and says, "I multiplied the top by 3 and the bottom by 4."

(a) Is Owen right? Explain using what happens when you cut the pieces.

(b) Write $\frac{2}{3}$ in twelfths correctly.

5. Fill in the table. Each box holds a name for the fraction at the start of its row, with the bottom number at the top of its column. If no whole number fits on top, write "none".

Fraction	bottom 8	bottom 10	bottom 12	bottom 100
$\frac{1}{2}$				
$\frac{1}{4}$				
$\frac{2}{5}$				

Then pick one box where you wrote "none" and explain in one sentence why no whole number fits.

6. Every granola bar in a box is marked into 5 equal pieces that snap apart. Andre has 7 of these pieces, which is more than one whole bar. Andre snaps every piece into 2 smaller pieces.

(a) How many small pieces make one whole bar?

(b) How many small pieces does Andre have?

(c) Write the amount of granola bar Andre has as two equivalent fractions.

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