Name: _____

Date: _____

Period _____

Making Equivalent Fractions

Instructions: An equivalent fraction can be made by multiplying the top and bottom numbers of a fraction by the same number. The problems below show this being done, but the number that is being multiplied by is missing. Write the missing number in the boxes. (Hint: you can use a multiplication table to help you.)

1 $\dfrac{4 \times \boxed{2}}{10 \times \boxed{2}} = \dfrac{8}{20}$

2 $\dfrac{2 \times \boxed{}}{5 \times \boxed{}} = \dfrac{6}{15}$

3 $\dfrac{3 \times \boxed{}}{8 \times \boxed{}} = \dfrac{24}{64}$

4 $\dfrac{7 \times \boxed{}}{10 \times \boxed{}} = \dfrac{35}{50}$

5 $\dfrac{10 \times \boxed{}}{25 \times \boxed{}} = \dfrac{40}{100}$

6 $\dfrac{9 \times \boxed{}}{25 \times \boxed{}} = \dfrac{54}{150}$

Instructions: The process of making an equivalent fraction works the same for division. For these problems, find the missing number that the top and bottom numbers are being *divided* by.

1 $\dfrac{4 \div \boxed{4}}{20 \div \boxed{4}} = \dfrac{1}{5}$

2 $\dfrac{25 \div \boxed{}}{40 \div \boxed{}} = \dfrac{5}{8}$

3 $\dfrac{9 \div \boxed{}}{33 \div \boxed{}} = \dfrac{3}{11}$

4 $\dfrac{21 \div \boxed{}}{70 \div \boxed{}} = \dfrac{3}{10}$

5 $\dfrac{35 \div \boxed{}}{100 \div \boxed{}} = \dfrac{7}{20}$

6 $\dfrac{81 \div \boxed{}}{900 \div \boxed{}} = \dfrac{9}{100}$

Equivalent Percent Form

Instructions: Convert each of these fractions into an equivalent fraction that has 100 as the bottom number. Then write that fraction in its percent form. (Some will need to be converted by multiplying and others by dividing.)

1 $\dfrac{3 \times 5}{20 \times 5} = \dfrac{15}{100} = 15\%$

2 $\dfrac{1}{20}$

3 $\dfrac{12}{50}$

4 $\dfrac{80}{200}$

5 $\dfrac{8}{25}$

6 $\dfrac{8}{10}$

7 $\dfrac{16}{400}$

8 $\dfrac{24}{300}$

9 $\dfrac{3}{5}$

10 $\dfrac{3}{2}$

11 $\dfrac{45}{500}$

12 $\dfrac{30}{25}$

Equivalent Percent Form - Set 2

Instructions: Convert each of these fractions into an equivalent fraction that has 100 as the bottom number. Then write that fraction in its percent form. (Some will need to be converted by multiplying and others by dividing.)

1 $\dfrac{50 \div 2}{200 \div 2} = \dfrac{25}{100} = 25\%$

2 $\dfrac{7}{10}$

3 $\dfrac{10}{500}$

4 $\dfrac{32}{400}$

5 $\dfrac{11}{25}$

6 $\dfrac{400}{800}$

7 $\dfrac{49}{700}$

8 $\dfrac{7}{5}$

9 $\dfrac{15}{50}$

10 $\dfrac{3}{2}$

11 $\dfrac{7}{20}$

12 $\dfrac{60}{600}$

Equivalent Fractions: Unknown Top Number

Instructions: In each pair of equivalent fractions below, a top number is unknown. Figure out what the relationship between the bottom numbers is. (In other words, figure out what was multiplied or divided by to get the new bottom number.) Then do that same thing to the top number to find the unknown value (n).

Example

$$\frac{2}{5} \overset{\times 6}{\underset{\times 6}{=}} \frac{n}{30}$$

so to find 'n', we also multiply by 6.

$n = 2 \times 6$

$n = 12$

to go from 5 to 30, we have to multiply by 6

1 $\quad \dfrac{4}{10} = \dfrac{n}{20}$

2 $\quad \dfrac{4}{6} = \dfrac{n}{24}$

3 $\quad \dfrac{30}{50} = \dfrac{n}{5}$

4 $\quad \dfrac{1}{3} = \dfrac{n}{21}$

5 $\quad \dfrac{9}{20} = \dfrac{n}{60}$

6 $\quad \dfrac{24}{64} = \dfrac{n}{8}$

7 $\quad \dfrac{12}{25} = \dfrac{n}{100}$

8 $\quad \dfrac{3}{11} = \dfrac{n}{66}$

9 $\quad \dfrac{21}{150} = \dfrac{n}{50}$

10 $\quad \dfrac{12}{8} = \dfrac{n}{40}$