math Antics Worksheets

Name: _____

Date: _____

Making Equivalent Fractions

P-PEF 1

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. $\frac{4}{10} \times \frac{\boxed{2}}{\boxed{2}} = \frac{8}{20}$

2. $\frac{2}{5} \times \frac{\square}{\square} = \frac{6}{15}$

3. $\frac{3}{8} \times \frac{\square}{\square} = \frac{24}{64}$

4. $\frac{7}{10} \times \frac{\square}{\square} = \frac{35}{50}$

5. $\frac{10}{25} \times \frac{\square}{\square} = \frac{40}{100}$

6. $\frac{9}{25} \times \frac{\square}{\square} = \frac{54}{150}$

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. $\frac{4}{20} \div \frac{\boxed{4}}{\boxed{4}} = \frac{1}{5}$

2. $\frac{25}{40} \div \frac{\square}{\square} = \frac{5}{8}$

3. $\frac{9}{33} \div \frac{\square}{\square} = \frac{3}{11}$

4. $\frac{21}{70} \div \frac{\square}{\square} = \frac{3}{10}$

5. $\frac{35}{100} \div \frac{\square}{\square} = \frac{7}{20}$

6. $\frac{81}{900} \div \frac{\square}{\square} = \frac{9}{100}$

math Antics Worksheets

Name:

Date:

Equivalent Percent Form

P-PEF 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. $\frac{3}{20} \times \frac{5}{5} = \frac{15}{100} = 15\%$

2. $\frac{1}{20}$

3. $\frac{12}{50}$

4. $\frac{80}{200}$

5. $\frac{8}{25}$

6. $\frac{8}{10}$

7. $\frac{16}{400}$

8. $\frac{24}{300}$

9. $\frac{3}{5}$

10. $\frac{3}{2}$

11. $\frac{45}{500}$

12. $\frac{30}{25}$

math Antics Worksheets

Name:

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Equivalent Percent Form - Set 2

P-PEF 3

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. $\frac{50 \div 2}{200 \div 2} = \frac{25}{100} = 25\%$

2. $\frac{7}{10}$

3. $\frac{10}{500}$

4. $\frac{32}{400}$

5. $\frac{11}{25}$

6. $\frac{400}{800}$

7. $\frac{49}{700}$

8. $\frac{7}{5}$

9. $\frac{15}{50}$

10. $\frac{3}{2}$

11. $\frac{7}{20}$

12. $\frac{60}{600}$

math Antics Worksheets

Name: _____

Date: _____

Equivalent Fractions: Unknown Top Number

P-PEF 4

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

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

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

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

$n = 2 \times 6$

$n = 12$

1. $\frac{4}{10} = \frac{n}{20}$

2. $\frac{4}{6} = \frac{n}{24}$

3. $\frac{30}{50} = \frac{n}{5}$

4. $\frac{1}{3} = \frac{n}{21}$

5. $\frac{9}{20} = \frac{n}{60}$

6. $\frac{24}{64} = \frac{n}{8}$

7. $\frac{12}{25} = \frac{n}{100}$

8. $\frac{3}{11} = \frac{n}{66}$

9. $\frac{21}{150} = \frac{n}{50}$

10. $\frac{12}{8} = \frac{n}{40}$

math Antics
Exercises

Name:

Date:

Percents & Equivalent Fractions

1 This problem shows a fraction's top and bottom numbers being multiplied by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{3 \times n}{25 \times n} = \frac{12}{100}$$

2 This problem shows a fraction's top and bottom numbers being multiplied by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{5 \times n}{10 \times n} = \frac{50}{100}$$

3 This problem shows a fraction's top and bottom numbers being divided by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{60 \div n}{200 \div n} = \frac{30}{100}$$

4 This problem shows a fraction's top and bottom numbers being divided by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{40 \div n}{500 \div n} = \frac{8}{100}$$

5 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{6}{10}$$

6 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{7}{25}$$

7 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{8}{20}$$

8 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{15}{300}$$

math Antics Worksheets

Name: _____

Date: _____

Making Equivalent Fractions

P-PEF 1

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. $\frac{4}{10} \times \frac{\boxed{2}}{\boxed{2}} = \frac{8}{20}$

2. $\frac{2}{5} \times \frac{\boxed{3}}{\boxed{3}} = \frac{6}{15}$

3. $\frac{3}{8} \times \frac{\boxed{8}}{\boxed{8}} = \frac{24}{64}$

4. $\frac{7}{10} \times \frac{\boxed{5}}{\boxed{5}} = \frac{35}{50}$

5. $\frac{10}{25} \times \frac{\boxed{4}}{\boxed{4}} = \frac{40}{100}$

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

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. $\frac{4}{20} \div \frac{\boxed{4}}{\boxed{4}} = \frac{1}{5}$

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

3. $\frac{9}{33} \div \frac{\boxed{3}}{\boxed{3}} = \frac{3}{11}$

4. $\frac{21}{70} \div \frac{\boxed{7}}{\boxed{7}} = \frac{3}{10}$

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

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

math Antics Worksheets

Name: _____

Date: _____

Equivalent Percent Form

P-PEF 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. $\frac{3}{20} \times \frac{5}{5} = \frac{15}{100} = 15\%$

2. $\frac{1}{20} \times \frac{5}{5} = \frac{5}{100} = 5\%$

3. $\frac{12}{50} \times \frac{2}{2} = \frac{24}{100} = 24\%$

4. $\frac{80}{200} \div \frac{2}{2} = \frac{40}{100} = 40\%$

5. $\frac{8}{25} \times \frac{4}{4} = \frac{32}{100} = 32\%$

6. $\frac{8}{10} \times \frac{10}{10} = \frac{80}{100} = 80\%$

7. $\frac{16}{400} \div \frac{4}{4} = \frac{4}{100} = 4\%$

8. $\frac{24}{300} \div \frac{3}{3} = \frac{8}{100} = 8\%$

9. $\frac{3}{5} \times \frac{20}{20} = \frac{60}{100} = 60\%$

10. $\frac{3}{2} \times \frac{50}{50} = \frac{150}{100} = 150\%$

11. $\frac{45}{500} \div \frac{5}{5} = \frac{9}{100} = 9\%$

12. $\frac{30}{25} \times \frac{4}{4} = \frac{120}{100} = 120\%$

math Antics Worksheets

Name:

Date:

Equivalent Percent Form - Set 2

P-PEF 3

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. $\frac{50 \div 2}{200 \div 2} = \frac{25}{100} = 25\%$

2. $\frac{7 \times 10}{10 \times 10} = \frac{70}{100} = 70\%$

3. $\frac{10 \div 5}{500 \div 5} = \frac{2}{100} = 2\%$

4. $\frac{32 \div 4}{400 \div 4} = \frac{8}{100} = 8\%$

5. $\frac{11 \times 4}{25 \times 4} = \frac{44}{100} = 44\%$

6. $\frac{400 \div 8}{800 \div 8} = \frac{50}{100} = 50\%$

7. $\frac{49 \div 7}{700 \div 7} = \frac{7}{100} = 7\%$

8. $\frac{7 \times 20}{5 \times 20} = \frac{140}{100} = 140\%$

9. $\frac{15 \times 2}{50 \times 2} = \frac{30}{100} = 30\%$

10. $\frac{3 \times 50}{2 \times 50} = \frac{150}{100} = 150\%$

11. $\frac{7 \times 5}{20 \times 5} = \frac{35}{100} = 35\%$

12. $\frac{60 \div 6}{600 \div 6} = \frac{10}{100} = 10\%$

math Antics Worksheets

Name: _____

Date: _____

Equivalent Fractions: Unknown Top Number

P-PEF 4

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

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

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

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

$n = 2 \times 6$

$n = 12$

1 $\frac{4}{10} \overset{\times 2}{=} \frac{n}{20}$ $n = 4 \times 2$ $n = 8$

2 $\frac{4}{6} \overset{\times 4}{=} \frac{n}{24}$ $n = 4 \times 4$ $n = 16$

3 $\frac{30}{50} \overset{\div 10}{=} \frac{n}{5}$ $n = 30 \div 10$ $n = 3$

4 $\frac{1}{3} \overset{\times 7}{=} \frac{n}{21}$ $n = 1 \times 7$ $n = 7$

5 $\frac{9}{20} \overset{\times 3}{=} \frac{n}{60}$ $n = 9 \times 3$ $n = 27$

6 $\frac{24}{64} \overset{\div 8}{=} \frac{n}{8}$ $n = 24 \div 8$ $n = 3$

7 $\frac{12}{25} \overset{\times 4}{=} \frac{n}{100}$ $n = 12 \times 4$ $n = 48$

8 $\frac{3}{11} \overset{\times 6}{=} \frac{n}{66}$ $n = 3 \times 6$ $n = 18$

9 $\frac{21}{150} \overset{\div 3}{=} \frac{n}{50}$ $n = 21 \div 3$ $n = 7$

10 $\frac{12}{8} \overset{\times 5}{=} \frac{n}{40}$ $n = 12 \times 5$ $n = 60$

math Antics Exercises

Name:

Date:

Percents & Equivalent Fractions

1 This problem shows a fraction's top and bottom numbers being multiplied by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{3 \times n}{25 \times n} = \frac{12}{100}$$

n = 4

2 This problem shows a fraction's top and bottom numbers being multiplied by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{5 \times n}{10 \times n} = \frac{50}{100}$$

n = 10

3 This problem shows a fraction's top and bottom numbers being divided by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{60 \div n}{200 \div n} = \frac{30}{100}$$

n = 2

4 This problem shows a fraction's top and bottom numbers being divided by a missing number (n) to get an equivalent fraction. What is the missing number?

$$\frac{40 \div n}{500 \div n} = \frac{8}{100}$$

n = 5

5 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{6 \times 10}{10 \times 10} = \frac{60}{100} = 60\%$$

Remember that you have to do the same thing to both the top and bottom numbers to get an equivalent fraction.

6 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{7 \times 4}{25 \times 4} = \frac{28}{100} = 28\%$$

7 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{8 \times 5}{20 \times 5} = \frac{40}{100} = 40\%$$

8 Convert this fraction into an equivalent fraction that has 100 as its bottom number. Then write it in percent form.

$$\frac{15 \div 3}{300 \div 3} = \frac{5}{100} = 5\%$$

See Video for step-by-step solutions to each problem.