Name_____ Date_____

Fractions To Decimals

Using Equivalent Fractions and Division

Fractions that have a denominator as a decimal place value such as 10, 100, 1000 and so on are easy to write as a decimal.

Example: $\frac{7}{10} = 0.7$ The seven is simply put in the tenths place.

Other fractions that do not have a power of ten as a denominator can not be simply written as the first example.

Example: $\frac{7}{20} \neq 0.7$ Seven over twenty is not equal to 7 tenths or 0.7.

Change the denominator into a power of ten such as a 10, 100, 1000 and so on. Choose a denominator that is easy to work with your existing denominator.

Equivalent Fraction Method

Example: $\frac{7}{20} = \frac{\quad}{100}$

100 is a decimal place value, that is why 20 was changed into 100!

$$\frac{7}{20}\ {}^{\times 5} = \frac{35}{100} = 0.35$$
$$_{\times 5}$$

Division Method

Another way to change a fraction that does not have a power of ten as a denominator is to turn the given fraction into a division problem. Remember, the numerator always goes "under the hat".

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Example: $\frac{7}{20}$ =

A: 20)7

B:
.
20)7.0

C:
.3
20)7.0
−60
10

D:
.3
20)7.00
−60↓
100

E:
.35
20)7.00
−60↓
100
−100
0

$\frac{7}{20} = .35$

Maisonet Math

Directions: Use your knowledge of equivalent fractions to change the following fractions into their decimal equivalents.

Example: $\frac{1}{5} = \frac{1}{5} = \frac{\_}{10}$ $\frac{1^{x2}}{5_{x2}} = \frac{\mathbf{2}}{10} = (0.2)$

Tenths is a decimal place value, that is why 10 is used.

1) $\frac{5}{50} = \_\_\_$

2) $\frac{8}{20} = \_\_\_$

3) $\frac{12}{60} = \_\_\_$

4) $\frac{3}{25} = \_\_\_$

5) $\frac{123}{250} = \_\_\_$

6) $\frac{60}{500} = \_\_\_$

7) $\frac{40}{200} = \_\_\_$

8) $\frac{22}{25} = \_\_\_$

9) $\frac{4}{5} = \_\_\_$

10) $\frac{6}{60} = \_\_\_$

11) $\frac{24}{80} = \_\_\_$

12) $\frac{28}{50} = \_\_\_$

Directions: Turn the following fractions into their decimal equivalents using division to solve.

13) $\frac{5}{50}$

14) $\frac{8}{20}$

15) $\frac{12}{60}$

16) $\frac{3}{25}$

17) $\frac{123}{250}$

18) $\frac{60}{500}$

19) $\frac{40}{200}$

20) $\frac{22}{25}$

21) $\frac{4}{5}$

22) $\frac{6}{60}$

23) $\frac{24}{80}$

24) $\frac{28}{50}$