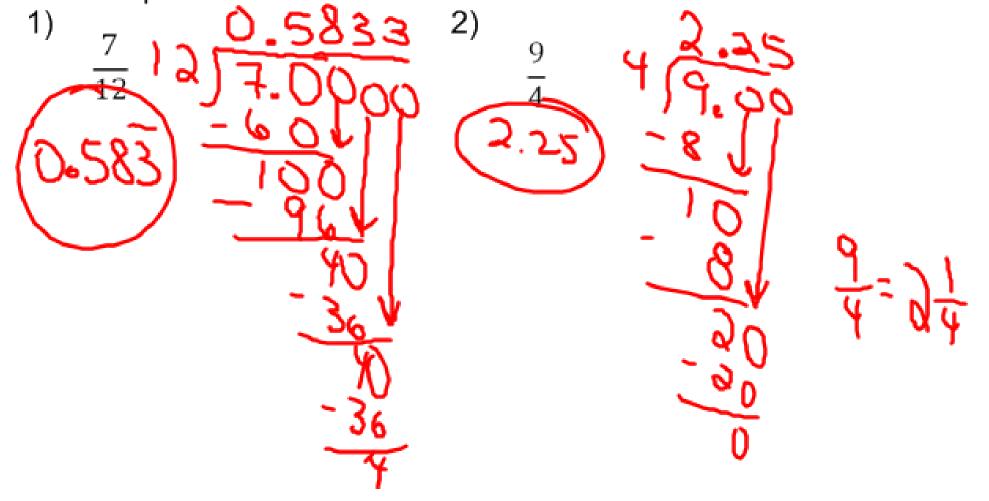Get out your homework and have it ready to check! Warm Up on the problems below. We will have a Target Check Monday over fractions and decimals.

Classwork - Fractions and Decimals Day 2

$$\frac{9 \cdot 25}{4 \cdot 25} = \frac{225}{100} = 2.25$$

Warm Up: Find the decimal value of the fractions below

1)

$$\frac{7}{12}$$

$$\boxed{0.58\overline{3}}$$

$$\begin{array}{r} 0.5833 \\ 12\overline{)7.00000} \\ -60 \\ \hline 100 \\ -96 \\ \hline 40 \\ -36 \\ \hline 40 \\ -36 \\ \hline 4 \end{array}$$

2)

$$\frac{9}{4}$$

$$\boxed{2.25}$$

$$\begin{array}{r} 2.25 \\ 4\overline{)9.00} \\ -8 \\ \hline 10 \\ -8 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

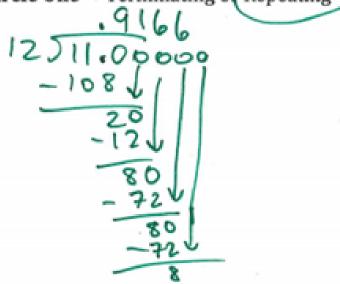$$\frac{9}{4} = 2\frac{1}{4}$$

1) Find the decimal value using long division. Put you answer in the space provided and then CIRCLE whether the decimal is terminating or repeating. SHOW WORK

A) $\frac{3}{8}$ = __0.375__

B) $4\frac{11}{12}$ = __$4.91\overline{6}$__

Circle One → (Terminating) or Repeating

$$
\begin{array}{r}
0.375 \\
8\overline{)3.000} \\
-24 \downarrow \\
\hline
60 \\
-56 \downarrow \\
\hline
40 \\
-40 \\
\hline
0
\end{array}
$$

Circle One → Terminating or (Repeating)

$$
\begin{array}{r}
.9166 \\
12\overline{)11.00000} \\
-108 \downarrow \\
\hline
20 \\
-12 \downarrow \\
\hline
80 \\
-72 \downarrow \\
\hline
80 \\
-72 \downarrow \\
\hline
8
\end{array}
$$

C) $6\frac{5}{11} = $ __$6.\overline{45}$__

D) $-\frac{7}{16} = $ __-0.4375__

Circle One → Terminating or ⟨Repeating⟩

Circle One → ⟨Terminating⟩ or Repeating

$$11\overline{)\,5.0000}\quad .4545$$

```
       .4545
  11 ) 5.0000
      -44↓
        60
       -55↓
         50
        -44↓
          60
         -55
           5
```

```
        0.4375
  16 ) 7.0000
      -64↓
        60
       -48↓
        120
       -112↓
          80
         -80
           0
```

2) Write each fraction as a decimal by making the denominator a power of 10. SHOW WORK

A) $\frac{3}{5} = $ __0.6__

B) $\frac{18}{20} = $ __0.9__

C) $3\frac{24}{50} = $ __3.48__

D) $8\frac{20}{25} = $ __8.8__

$\frac{3\cdot 2}{5\cdot 2} = \frac{6}{10}$

$\frac{18\cdot 5}{20\cdot 5} = \frac{90}{100} = 0.90$

$\frac{24\cdot 2}{50\cdot 2} = \frac{48}{100}$

$\frac{20\cdot 4}{25\cdot 4} = \frac{80}{100} = 8.80$

Write Decimals as Fractions

Every terminating decimal can be written as a fraction with a denominator of 10, 100, 1,000, or a greater power of ten. Use the place value of the final digit as the denominator.

Example Watch Tutor

7. **Find the fraction of the fish in the aquarium that are goldfish. Write in simplest form.**

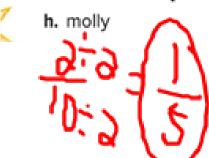| Fish	Amount
Angelfish	0.4
Goldfish	0.15
Guppy	0.25
Molly	0.2

$$0.15 = \frac{15}{100} \stackrel{\div 5}{\div 5}$$ The digit 5 is in the hundredths place.

$$= \frac{3}{20}$$ Simplify.

So, $\frac{3}{20}$ of the fish are goldfish.

Got it? Do these problems to find out.

Determine the fraction of the aquarium made up by each fish. Write the answer in simplest form.

h. molly

$$\frac{2 \div 2}{10 \div 2} = \boxed{\frac{1}{5}}$$

i. guppy

$$\frac{25 \div 25}{100 \div 25} = \frac{1}{4}$$

j. angelfish

$$\frac{4 \div 2}{10 \div 2} = \boxed{\frac{2}{5}}$$

(handwritten margin note) 0.1 $\frac{1}{10}$

Write each fraction or mixed number as a decimal. Use bar notation if needed. (Examples 1–6)

1. $\dfrac{2}{5}$ = _____

2. $-\dfrac{9}{10}$ = _____

3. $\dfrac{5}{9}$ = _____

4. During a hockey game, an ice resurfacer travels 0.75 mile. What fraction represents this distance? (Example 7)

_____

Extra Practice - Write the following decimals as a fraction.

$1.15 = \underline{1\frac{3}{20}}$

$0.6 = \underline{3/5}$

$$\frac{15 \div 5}{100 \div 5} = \frac{3}{20}$$

$$\frac{6 \div 2}{10 \div 2} = \frac{3}{5}$$

$-0.125 = \underline{-\frac{1}{8}}$

$5.44 = \underline{5\frac{11}{25}}$

$$\frac{125 \div 5}{1000 \div 5} = \frac{25 \div 25}{200 \div 25} = \frac{1}{8}$$

$$\frac{44 \div 4}{100 \div 4} = \frac{11}{25}$$