

HW: 1-1 MathXL for School Additional Practice
(on Google Classroom)

Warm up:

Write the following decimals as fractions.

$$1) 0.7 = \frac{7}{10}$$

$$2) 0.402 = \frac{402}{1000} = \frac{201}{500}$$

$$3) -6.38 = -6 \frac{38}{100} = -6 \frac{19}{50}$$

How do we convert fractions to decimals?

$$5/8$$

$$\begin{array}{r} 0.625 \\ \hline 8 \overline{) 5.000} \\ \underline{-48} \\ 20 \\ \underline{-16} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

$$4\frac{7}{12}$$

$$\begin{array}{r} 4.583\bar{3} \\ \hline 12 \overline{) 7.0000} \\ \underline{-60} \\ 100 \\ \underline{-96} \\ 40 \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 40 \end{array}$$

$$4.58\bar{3}$$

$$0.\overline{44} = \frac{4}{9}$$

$$0.\overline{592592} \quad \frac{592}{999}$$

592.592592

$$0.\overline{3939} = \frac{39}{99} = \left(\frac{13}{33} \right)$$

Why is that true?

$$x = 0.4\bar{4}$$

$$10x = 4.4\bar{4}$$

$$10x - x = 4.4\bar{4} - 0.4\bar{4}$$

$$\frac{9x}{9} = \frac{4}{9}$$

$$x = \frac{4}{9}$$

$$\begin{array}{r} 4.\cancel{4\bar{4}} \\ - 0.\cancel{4\bar{4}} \\ \hline 4 \end{array}$$

$$x = 0.1\bar{3}$$

$$100x = 13.1\bar{3}$$

$$100x - x = 13$$

$$99x = 13$$

$$\frac{13}{99}$$

$$0.9\overline{9} = \frac{9}{9} = 1$$

$$0.\overline{888} = \frac{8}{9}$$

$$0.32 = \frac{32}{100} = \frac{16}{50} = \frac{8}{25}$$

$$0.9 = \frac{9}{10}$$

$$-3.44 = -3 \frac{44}{100} = -3 \frac{11}{25}$$

$$0.5\bar{5} = \frac{5}{9}$$

$$4.63\overline{63} = 4 \frac{63}{99} = 4 \frac{21}{33} = 4 \frac{7}{11}$$

1) 0.68

$$\frac{68}{100} = \frac{34}{50} = \frac{17}{25}$$

5) 0.48 $\overline{48}$

$$\frac{48}{99} = \frac{16}{33}$$

2) -0.07

$$-\frac{7}{100}$$

6) -3.55

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

3) 0.774

$$\frac{774}{1000} = \frac{387}{500}$$

7) 0.0430 $\overline{43}$

$$\frac{43}{999}$$

4) 5.92

$$5\frac{92}{100} = 5\frac{46}{50} = 5\frac{23}{25}$$

8) 9.83 $\overline{83}$

$$9\frac{83}{99}$$

$0.3\overline{55}$

$$0.5\overline{5} - 0.2$$

$$\frac{5}{9} - \frac{2}{10}$$

$$\frac{50}{90} - \frac{18}{90} = \frac{32}{90}$$

$$= \frac{16}{45}$$