Fractions and Decimals

6th Grade Mathematics
Mr. Wong

Ex. 1: Write each fraction or mixed number as a decimal.

Reduce, if possible.

Divide 8 by 3 to make a decimal.

$5 \dfrac{3}{8}$

$$
\begin{array}{r}
0.375 \\
8\overline{\smash)3.000} \\
\underline{24} \\
60 \\
\underline{56} \\
40
\end{array}
$$

5.375

Ex. 2: Write each fraction or mixed number as a decimal.

$$\frac{7}{11}$$

Reduce, if possible.

Divide 11 by 7 to make a decimal.

$$0.6\,3\,6\,3$$

$$11\,\overline{)\,7.0\,0\,0}$$

$$\underline{6\,6}$$

$$4\,0$$

$$\underline{3\,3}$$

$$7\,0$$

$$0.\overline{63}$$

Ex. 3: Order from least to greatest.

$$1.2, \frac{3}{5}, -0.5, \frac{9}{10}$$

Convert fractions to decimals.

$$0.6 = \frac{3}{5}, \quad 0.9 = \frac{9}{10}$$

Put in order from least to greatest.

$$-0.5, \frac{3}{5}, \frac{9}{10}, 1.2$$

Ex. 4: Order from least to greatest.

$$-0.75, \quad \frac{-1}{4}, \quad -0.625, \quad \frac{-1}{8}$$

Convert fractions to decimals.

$$-0.25 = \frac{-1}{4}, \quad -0.125 = \frac{-1}{8}$$

Put in order from least to greatest.

$$-0.75, \quad -0.625, \quad \frac{-1}{4}, \quad \frac{-1}{8}$$

Ex. 5: Write as a fraction or a mixed number.

0.35

How would you read this decimal?

Thirty-five hundredths.

Write that as a fraction.

Factor tree 35 and 100.

What can cancel out?

$$\frac{35}{100} = \frac{\cancel{5} \cdot 7}{2 \cdot 2 \cdot \cancel{5} \cdot 5} = \frac{7}{20}$$

Ex. 6: Write as a fraction or a mixed number.

-6.8

How would you read this decimal?

Negative six and eight tenths.

Write that as a fraction.

Factor tree 8 and 10.

What can we cancel out?

$$-6\frac{8}{10} = -6\ \frac{2\cdot2\cdot2}{2\cdot5} = -6\frac{4}{5}$$