

1. Express as a whole number or ratio of whole numbers.

$$10^2 =$$

$$2^2 =$$

$$10^1 =$$

$$2^1 =$$

$$10^0 =$$

$$2^0 =$$

$$10^{-1} =$$

$$2^{-1} =$$

$$10^{-2} =$$

$$2^{-2} =$$

$$10^{-3} =$$

$$2^{-3} =$$

$$10^{-4} =$$

$$2^{-4} =$$

$$10^{-5} =$$

$$2^{-5} =$$

$$10^{-6} =$$

$$2^{-6} =$$

2. Simplify.

$$(10^2)(10^{-2}) =$$

$$(2^2)(2^{-2}) =$$

$$(10)(10^{-1}) =$$

$$(2)(2^{-1}) =$$

$$(10^6)(10^{-6}) =$$

$$(2^6)(2^{-6}) =$$

3. Simplify into a ratio of whole numbers.

$$\left(\frac{1}{10}\right) \left(\frac{1}{10}\right) =$$

$$\left(\frac{1}{2}\right) \left(\frac{1}{2}\right) =$$

$$\left(\frac{5}{10}\right) \left(\frac{1}{10}\right) =$$

$$\left(\frac{5}{2}\right) \left(\frac{1}{2}\right) =$$

$$\left(\frac{1}{10}\right) \left(\frac{6}{10}\right) =$$

$$\left(\frac{1}{2}\right) \left(\frac{6}{2}\right) =$$

$$\left(\frac{5}{10}\right) \left(\frac{6}{10}\right) =$$

$$\left(\frac{5}{2}\right) \left(\frac{6}{2}\right) =$$

$$\left(\frac{2}{10}\right) \left(\frac{5}{10}\right) =$$

$$\left(\frac{2}{2}\right) \left(\frac{5}{2}\right) =$$

$$\left(\frac{7}{10}\right) \left(\frac{3}{10}\right) =$$

$$\left(\frac{7}{2}\right) \left(\frac{3}{2}\right) =$$

4. Simplify into a ratio of whole numbers.

$$\frac{1}{\left(\frac{1}{2}\right)} =$$

$$\frac{3}{\left(\frac{1}{2}\right)} =$$

$$\frac{4}{\left(\frac{1}{2}\right)} =$$

$$\frac{\left(\frac{1}{2}\right)}{1} =$$

$$\frac{\left(\frac{1}{2}\right)}{3} =$$

$$\frac{\left(\frac{1}{2}\right)}{4} =$$

$$\frac{\left(\frac{1}{2}\right)}{\left(\frac{3}{4}\right)} =$$

$$\frac{\left(\frac{2}{3}\right)}{\left(\frac{4}{5}\right)} =$$

$$\frac{\left(\frac{3}{4}\right)}{\left(\frac{5}{6}\right)} =$$

5. Is each statement true or false? Cross-multiply.

$$\left(\frac{1}{10}\right) = \left(\frac{1}{10}\right)$$

$$\left(\frac{1}{4}\right) = \left(\frac{4}{16}\right)$$

$$\left(\frac{3}{5}\right) = \left(\frac{6}{15}\right)$$

$$\left(\frac{2}{3}\right) = \left(\frac{6}{8}\right)$$

$$\left(\frac{-3}{5}\right) = \left(\frac{-6}{10}\right)$$

$$-\left(\frac{3}{5}\right) = \left(\frac{-6}{-10}\right)$$

6. Simplify into a ratio of whole numbers.

$$\left(\frac{1}{2}\right) + \left(\frac{1}{3}\right) =$$

$$\left(\frac{4}{5}\right) + \left(\frac{6}{7}\right) =$$

$$\left(\frac{1}{2}\right) + \left(\frac{3}{4}\right) =$$

$$\left(\frac{1}{2}\right) + \left(\frac{3}{8}\right) =$$