

## Changing Fractions to Decimals

Remember that a fraction can be understood as a division problem. To change a fraction to a decimal, divide the denominator into the numerator. To divide, add a decimal point and zeros to the numerator. Usually two zeros are enough. Then bring the point up in the answer.

**EXAMPLE 1** Write  $\frac{1}{2}$  as a decimal.

**STEP 1** Divide 2 into 1. Add a decimal point and a zero to 1.

$$\begin{array}{r} 0.5 \\ 2 \overline{)1.0} \end{array}$$

**STEP 2** Divide and bring up the decimal point.

**EXAMPLE 2** Write  $\frac{3}{20}$  as a decimal.

**STEP 1** Divide 20 into 3. Add a decimal point and two zeros to 3.

$$\begin{array}{r} 0.15 \\ 20 \overline{)3.00} \end{array}$$

**STEP 2** Divide and bring up the decimal point.

**EXAMPLE 3** Write  $\frac{2}{3}$  as a decimal.

**STEP 1** Divide 3 into 2. Add a decimal point and two zeros to 2.

$$\begin{array}{r} 0.66\frac{2}{3} \\ 3 \overline{)2.00} \end{array}$$

**STEP 2** Divide and bring up the decimal point.

In the last example, the division will not come out evenly no matter how many zeros you add. After two places, write the remainder as a fraction over the number you divided by.

Write each fraction as a decimal.

1.  $\frac{1}{4} =$                        $\frac{2}{5} =$                        $\frac{5}{8} =$                        $\frac{1}{3} =$

2.  $\frac{2}{9} =$                        $\frac{6}{25} =$                        $\frac{1}{6} =$                        $\frac{3}{8} =$

3.  $\frac{5}{6} =$                        $\frac{3}{10} =$                        $\frac{4}{7} =$                        $\frac{5}{12} =$

4.  $\frac{3}{5} =$                        $\frac{9}{10} =$                        $\frac{1}{12} =$                        $\frac{4}{9} =$

5.  $\frac{2}{15} =$                        $\frac{3}{4} =$                        $\frac{1}{8} =$                        $\frac{12}{25} =$