

8.2 Fractions, Decimals, and Percents

Example 1: Convert Decimals to Percents and Fractions

Convert each decimal to a percent and a fraction.

a) 0.0032
 $\times 100$
 $\frac{32}{10000} = \frac{2}{625}$
 0.32%
 check? $\frac{2}{625}$

b) 0.125
 $\times 100$
 $\frac{125}{1000} = \frac{1}{8}$
 12.5%

c) 3.26
 $\times 100$
 $\frac{326}{100} = \frac{163}{50}$
 326%

Example 2: Convert Percents to Decimals and Fractions

Convert each percent to a decimal and a fraction.

a) 160%
 $\frac{160}{100}$
 1.6
 $\frac{16}{10} = \frac{8}{5}$

b) 0.35%
 $\frac{0.35}{100}$
 $\frac{35}{10000} = \frac{7}{2000}$
 0.0035

c) $25\frac{3}{5}\%$
 $25\frac{6}{10}$
 $\downarrow$
 $\frac{256}{100} = \frac{256}{1000} = \frac{64}{250} = \frac{32}{125}$
 0.256

Example 3: Convert Fractions to Decimals and Percents

a) $\frac{1}{20}$
 $\times 5 = \frac{5}{100}$
 0.05
 5%

b) $\frac{71}{200}$
 $\times 5 = \frac{355}{1000}$
 $\div 2 = \frac{35.5}{100}$
 0.355
 35.5%

c) $\frac{4}{3}$
 $\frac{4(100)}{3} = \frac{400}{3} = 133.\bar{3}\%$
 $1.\bar{3}$