

Week 2

Introduction to Percent

Percent means out of 100.

MA123: Mathematical Reasoning & Modeling
(Spring 2021)

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Example 1:

Convert 2.7% to a decimal

$$\frac{2.7\%}{100\%} = \frac{2.7}{100} = 0.027$$

Example 2:

Convert 0.39% to a decimal

$$\frac{0.39\%}{100\%} = \frac{0.39}{100} = 0.0039$$

Example 3:

Convert 0.078 to a percent.

$$\begin{aligned} 0.078 &\times 100\% \\ &= 7.8\% \end{aligned}$$

Example 4:

Convert 0.4733 to a percent.

$$\begin{aligned} 0.4733 &\times 100\% \\ &= 47.33\% \end{aligned}$$

Example 5:

The fraction $\frac{27}{25}$ is equivalent
to what percent?

$$\frac{27}{25} \times 100\% = 108\%$$

Example 6:

Convert $8\frac{5}{6}\%$ to a fraction or mixed number.

$$\begin{aligned}\frac{8\frac{5}{6}\%}{100\%} &= \frac{8\frac{5}{6}}{100} = \frac{\frac{53}{6}}{100} = \frac{53}{6} \div 100 \\ &= \frac{53}{6} * \frac{1}{100} \\ &= \frac{53}{600} \text{ (Fraction)}\end{aligned}$$

Example 7:

Convert $7\frac{1}{6}$ to percent.

Write your answer as a decimal rounded to the nearest hundredth.

$$\begin{aligned} 7\frac{1}{6} * 100\% &= \frac{43}{6} * 100\% \\ &= 716.667 \end{aligned}$$

To the nearest hundredth, we have 716.67