

Change the following decimals to percents (do not round).

$$1. 0.5$$

$$\begin{array}{r} 0.50 \\ \square \square \\ \hline 1 \quad 2 \end{array}$$

$$0.5 = 50\%$$

$$2. 2.75$$

$$\begin{array}{r} 2.75 \\ \square \square \\ \hline 1 \quad 2 \end{array}$$

$$2.75 = 275\%$$

$$3. -3.285$$

$$\begin{array}{r} -3.285 \\ \square \square \square \\ \hline 1 \quad 2 \end{array}$$

$$-3.285 = -328.5\%$$

$$4. 0.025$$

$$\begin{array}{r} 0.025 \\ \square \square \square \\ \hline 1 \quad 2 \end{array}$$

$$0.025 = 2.5\%$$

$$5. -0.000125$$

$$\begin{array}{r} -0.000125 \\ \square \square \square \square \\ \hline 1 \quad 2 \end{array}$$

$$-0.000125 = -0.0125\%$$

$$6. 427,279.286$$

$$\begin{array}{r} 427,279.286 \\ \square \square \square \square \\ \hline 1 \quad 2 \end{array}$$

$$42,727,928.6\%$$

Change the following percents to decimals (do not round).

$$7. 76\%$$

$$\begin{array}{r} 76 \\ \square \square \\ \hline 2 \quad 1 \end{array}$$

$$76\% = 0.76$$

$$8. 0.25\%$$

$$\begin{array}{r} 00.25 \\ \square \square \square \\ \hline 2 \quad 1 \end{array}$$

$$0.25\% = 0.0025$$

$$9. 932\%$$

$$\begin{array}{r} 932 \\ \square \square \square \\ \hline 2 \quad 1 \end{array}$$

$$932\% = 9.32$$

$$10. 2,942.2837\%$$

$$\begin{array}{r} 2,942.2837 \\ \square \square \square \square \square \\ \hline 2 \quad 1 \end{array}$$

$$2,942.2837\% = 29.422837$$

$$11. 0.002\%$$

$$\begin{array}{r} 00.002 \\ \square \square \square \square \\ \hline 2 \quad 1 \end{array}$$

$$0.002\% = 0.00002$$

$$12. 7\%$$

$$\begin{array}{r} 07 \\ \square \square \\ \hline 2 \quad 1 \end{array}$$

$$7\% = 0.07$$

Find the percent change from the first number to the second number. State if it is a percent increase or a percent decrease.

13. 10 to 12

$$\% = \left(\frac{\text{Final} - \text{Original}}{\text{Original}} \right) \times 100$$

$$\% = \left(\frac{12 - 10}{10} \right) \times 100$$

$$\% = \left(\frac{2}{10} \right) \times 100$$

$$\% = 0.2 \times 100$$

$$\% = 20\%$$

To go from 10 to 12 is an increase of 20%

14. 13 to 6

$$\% = \left(\frac{\text{Final} - \text{Original}}{\text{Original}} \right) \times 100$$

$$\% = \left(\frac{6 - 13}{13} \right) \times 100$$

$$\% = \left(\frac{-7}{13} \right) \times 100$$

$$\% = -0.54 \times 100$$

$$\% = -54\%$$

To go from 13 to 6 is a decrease of 54%

$$-7 \div 13$$

$$\begin{array}{r} .538 \\ 13 \overline{) 7.000} \\ \underline{-65} \\ 50 \\ \underline{-39} \\ 110 \end{array}$$

$$\begin{array}{r} .538 \\ 13 \overline{) 7.000} \\ \underline{-65} \\ 50 \\ \underline{-39} \\ 110 \end{array}$$

$$-0.538 \approx -0.54$$

15. \$19.99 to \$15.99

$$\% = \left(\frac{\text{Final} - \text{Original}}{\text{Original}} \right) \times 100$$

$$\% = \left(\frac{15.99 - 19.99}{19.99} \right) \times 100$$

$$\% = \left(\frac{-4}{19.99} \right) \times 100$$

$$\% = -0.2 \times 100$$

$$\% = -20\%$$

To go from \$19.99 to \$15.99 is a decrease of 20%

$$-4 \div 19.99$$

$$19.99 \overline{) 4}$$

Moving the decimals:

$$\begin{array}{r} .200 \\ 1999 \overline{) 4000.000} \\ \underline{-3998} \\ 200 \end{array}$$

$$\approx -0.20$$

16. \$1.75 to \$2.00

$$\% = \left(\frac{\text{Final} - \text{Original}}{\text{Original}} \right) \times 100$$

$$\% = \left(\frac{2.00 - 1.75}{1.75} \right) \times 100$$

$$\% = \left(\frac{0.25}{1.75} \right) \times 100$$

$$\% = 0.14 \times 100$$

$$\% = 14\%$$

To go from \$1.75 to \$2.00 is an increase of 14%

$$0.25 \div 1.75$$

$$1.75 \overline{) 0.25}$$

Moving the decimals:

$$\begin{array}{r} .142 \\ 175 \overline{) 25.000} \\ \underline{-175} \\ 750 \\ \underline{-700} \\ 500 \end{array}$$

$$\approx 0.14$$