7.3 Percents and Decimals

Goal: Use decimals to solve percent problems.

Percents and Decimals 0.25 25%.

- To write a decimal as a percent, move the decimal point two places to the right and add a % sign.
- To write a percent as a decimal, move the decimal point two places to the left and add any necessary 0s. 40%. 0.4

Example 1 *Writing Decimals as Percents*

Write 0.17, 2, and 3.2 as percents.

a. 0.17 = 0.17. = 17%

b. 2 = 2.00 = 200%

c. 3.2 = 3.20 = 320%

Example 2 *Writing Percents as Decimals*

Write 63%, 0.7%, and 129% as decimals.

a. 63% = .63% = 0.63

b. 0.7% = 00.7% = 0.007

c. 129% = .129% = 1.29

✔ ***Checkpoint*** **Write the decimal as a percent or the percent as a decimal.**

1. 0.54. 54%	2. 4.00 400%	3. 1.75 175%	4. 0.03 3%
5. .41% 0.41	6. 1.47% 1.47	7. .9% 0.09	8. .125 0.125

Example 3 *Writing Fractions as Percents*

Write $\frac{4}{9}$ and $\frac{7}{4}$ as percents.

a. $\frac{4}{9} = 0.\overline{4444}$ (1) Write fraction as a decimal.

$= 44.4\%$ (2) Write decimal as a percent.

b. $\frac{7}{4} = 1.75$ (1) Write fraction as a decimal.

$= 175\%$ Write decimal as a percent.

Checkpoint **Write the fraction as a percent.**

9. $\frac{5}{8}$	10. $\frac{8}{9}$	11. $\frac{11}{5}$ or $2\frac{1}{5}$	12. $\frac{13}{6}$ or $2\frac{1}{6}$
0.625	$0.\overline{8888}$	2.20	$2.1\overline{6666}$
62.5%	$88.\overline{8}\%$	220%	$216.\overline{6}\%$

Example 4 *Finding a Percent of a Number*

Day of Dread In a survey of 1300 adults, 18% said the day they dread the most is Monday. How many adults chose Monday?

Solution

Find 18% of 1300.

18% of 1300 $= 0.18 \cdot 1300$ Write percent as decimal.

$= 234$ Multiply.

Answer: The number of adults that chose Monday is 234.

Checkpoint **Find the percent of the number.**

13. 25% of 76	14. 110% of 65	15. 0.7% of 500
$0.25 \cdot 76$	$1.1 \cdot 65$	$0.007 \cdot 500$
19	71.5	3.5