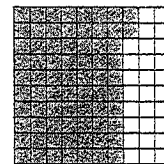


Name _____

Fractions, Decimals, and Percents

R 7-2

Fractions, decimals, and percents all name parts of a whole. The grid to the right has 72 out of 100 squares shaded.



72 out of 100 are shaded. As a fraction, that is $\frac{72}{100}$.
As a decimal, that is 0.72. As a percent, that is 72%.

Write 40% as a fraction and decimal.

$$40\% = \frac{40}{100} = 0.40$$

The decimal point moves two places to the left.

Write 0.3% as a fraction and decimal.

$$0.3\% = \frac{0.3}{100} = 0.003$$

The decimal point moves two places to the left. Fill in any spaces with zeros.

Write 0.47 as a fraction and percent.

$$0.47 = \frac{47}{100} = 47\%$$

Write $\frac{3}{4}$ as a decimal and percent.

You can use a proportion:

$$\frac{3}{4} = \frac{n}{100}$$
$$\frac{4n}{4} = \frac{300}{4}$$

$$n = 75$$

$$\text{So, } \frac{3}{4} = 0.75 = 75\%.$$

Write each in two other ways.

1. $\frac{2}{10}$ _____; _____

2. $\frac{23}{100}$ _____; _____

3. $\frac{7}{10}$ _____; _____

4. 97% _____; _____

5. 16% _____; _____

6. 52% _____; _____

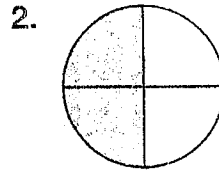
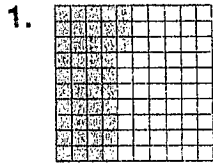
7. 0.04 _____; _____

8. 0.35 _____; _____

9. **Number Sense** Sheila got 87% of the problem correct.
Patrick got $\frac{91}{100}$ correct. Who scored higher? _____

Fractions, Decimals, and Percents

Describe the shaded portion of each as a fraction, decimal, and percent.



Write each in two other ways.

3. 64%

4. 0.09

5. $\frac{12}{50}$

6. 37%

7. $\frac{4}{250}$

8. 0.023

The table at the right shows the number of states in the United States at different times in history. There are currently 50 states in the United States. Use the information to answer the questions.

Year	States
1792	15
1817	20
1836	25
1848	30
1863	35
1889	40
1896	45
1959	50

9. In what year were there 0.5 as many states as today?

10. What percent of the current number of states had joined the United States by the year 1863?

11. In what year were there about $\frac{2}{3}$ as many states as in 1896?

Test Prep

12. Which of the following is equivalent to 98%?

A. 0.49

B. $\frac{100}{98}$

C. 0.98

D. $\frac{49}{100}$

13. **Writing in Math** Explain how you would write $\frac{5}{6}$ as a percent.
