

**LESSON**  
**6-1**

**Review for Mastery**

**Percents**

To change a percent to a fraction:

- drop the percent symbol;

- write the percent as the numerator of a fraction;  $45\% = \frac{45}{100} = \frac{9}{20}$

- write 100 as the denominator;
- simplify.

**Write each percent as a fraction in simplest form.**

1.  $38\% = \frac{\quad}{100} = \underline{\hspace{2cm}}$

2.  $20\% = \frac{\quad}{100} = \underline{\hspace{2cm}}$

3.  $70\% = \frac{\quad}{100} = \underline{\hspace{2cm}}$

4.  $16\% = \frac{\quad}{100} = \underline{\hspace{2cm}}$

5.  $36\% = \frac{\quad}{100} = \underline{\hspace{2cm}}$

6.  $8\% = \frac{\quad}{100} = \underline{\hspace{2cm}}$

7.  $15\% = \underline{\hspace{2cm}}$

8.  $53\% = \underline{\hspace{2cm}}$

9.  $24\% = \underline{\hspace{2cm}}$

10.  $17\% = \underline{\hspace{2cm}}$

To change a percent to a decimal:

- drop the percent symbol;

$45\% = \overset{\curvearrowright}{.45} = 0.45$

- move the decimal point two places to the left.

$7\% = \overset{\curvearrowright}{.07} = 0.07$

**Write each percent as a decimal.**

11. 58%

12. 93%

13. 15%

14. 9%

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

15. 26%

16. 2%

17. 80%

18. 1%

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

19. 23.5%

20. 9.6%

21. 40.7%

22. 7.03%

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

**LESSON**  
**6-2**

**Review for Mastery**

**Fractions, Decimals, and Percents**

To change a decimal to a percent:

- move the decimal point two places to the right;
- write the % symbol after the number.

$$0.07 = .07 = 7\%$$

**Write each decimal as a percent.**

1. 0.34

\_\_\_\_\_

2. 0.06

\_\_\_\_\_

3. 0.93

\_\_\_\_\_

4. 0.57

\_\_\_\_\_

5. 0.8

\_\_\_\_\_

6. 0.734

\_\_\_\_\_

7. 0.082

\_\_\_\_\_

8. 0.225

\_\_\_\_\_

9. 0.604

\_\_\_\_\_

10. 0.09

\_\_\_\_\_

11. 0.518

\_\_\_\_\_

12. 0.039

\_\_\_\_\_

To change a fraction to a percent:

- Divide the numerator by the denominator.
- Move the decimal point 2 places to the right

$$\frac{8}{25} = 8 \div 25 = 0.32$$

$$= 0.32 = 32\%$$

You can also set it equal to 100 if your denominator is compatible with 100.

$$\frac{8}{25} = \frac{x}{100}$$

**Write each fraction as a percent.**

13.  $\frac{3}{10}$

\_\_\_\_\_

14.  $\frac{2}{50}$

\_\_\_\_\_

15.  $\frac{7}{20}$

\_\_\_\_\_

16.  $\frac{1}{5}$

\_\_\_\_\_

17.  $\frac{1}{8}$

\_\_\_\_\_

18.  $\frac{3}{25}$

\_\_\_\_\_

19.  $\frac{3}{4}$

\_\_\_\_\_

20.  $\frac{23}{40}$

\_\_\_\_\_

21.  $\frac{11}{20}$

\_\_\_\_\_

22.  $\frac{43}{50}$

\_\_\_\_\_

23.  $\frac{24}{25}$

\_\_\_\_\_

24.  $\frac{7}{8}$

\_\_\_\_\_

**LESSON**  
**6-4**

**Review for Mastery**

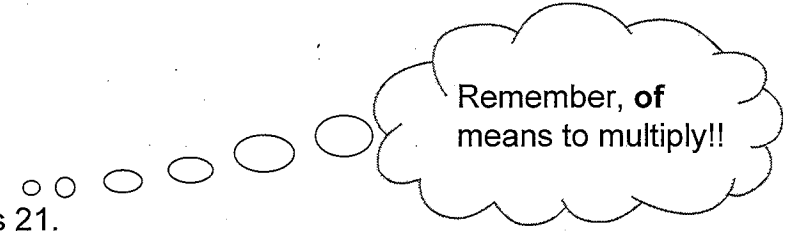
**Percent of a Number**

You change the percent to a decimal and multiply.

Find 35% of 60.

$$.35 \times 60 = 21$$

So 35% of 60 is 21.



Remember, **of**  
means to multiply!!

**Find the percent of each number.**

1. 40% of 90

\_\_\_\_\_

2. 85% of 520

\_\_\_\_\_

3. 30% of 80

\_\_\_\_\_

4. 47% of 300

\_\_\_\_\_

5. 45% of 200

\_\_\_\_\_

6. 120% of 70

\_\_\_\_\_

7. 65% of 40

\_\_\_\_\_

8. 25% of 76

\_\_\_\_\_

9. 115% of 40

\_\_\_\_\_

10. 275% of 12

\_\_\_\_\_

**LESSON**  
**6-6**

**Review for Mastery**

**Percent of Change**

A change in a quantity is often described as a percent increase or percent decrease. To calculate a percent increase or decrease, use this equation.

$$\text{percent of change} = \frac{\text{amount of increase or decrease}}{\text{original amount}} \cdot 100$$

Find the percent of change from 28 to 42.

- First, find the amount of the change.  $42 - 28 = 14$
- What is the original amount? 28
- Use the equation.  $\frac{14}{28} \cdot 100 = 50\%$

An increase from 28 to 42 represents a 50% increase.

**Find each percent of change.**

- |  |  |
|--|--|
| <p>1. 8 is increased to 22<br/>                 amount of change <math>22 - 8 =</math> _____<br/>                 original amount _____<br/>                 _____<br/>                 _____ <math>\cdot 100 =</math> _____ %</p>       | <p>2. 90 is decreased to 81<br/>                 amount of change <math>90 - 81 =</math> _____<br/>                 original amount _____<br/>                 _____<br/>                 _____ <math>\cdot 100 =</math> _____ %</p>   |
| <p>3. 125 is increased to 200<br/>                 amount of change <math>200 - 125 =</math> _____<br/>                 original amount _____<br/>                 _____<br/>                 _____ <math>\cdot 100 =</math> _____ %</p> | <p>4. 400 is decreased to 60<br/>                 amount of change <math>400 - 60 =</math> _____<br/>                 original amount _____<br/>                 _____<br/>                 _____ <math>\cdot 100 =</math> _____ %</p> |
| <p>5. 64 is decreased to 48<br/>                 _____<br/>                 _____</p>  | <p>6. 140 is increased to 273<br/>                 _____<br/>                 _____</p>  |
| <p>7. 30 is decreased to 6<br/>                 _____<br/>                 _____</p>   | <p>8. 15 is increased to 21<br/>                 _____<br/>                 _____</p>  |
| <p>9. 7 is increased to 21<br/>                 _____<br/>                 _____</p>   | <p>10. 320 is decreased to 304<br/>                 _____<br/>                 _____</p>   |