Name _____ Class _____ Date _____

Reteaching 6-1 Ratios and Unit Rates

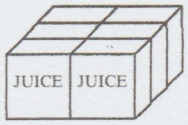
One store has 6-packs of juice for $.90. Another store has 8-packs of the same size juice cartons for $1.12. Which is the better buy?

Find the unit rates.

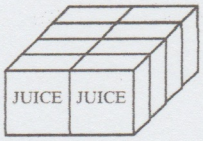
6-pack: $\frac{\text{price} \rightarrow}{\text{number} \rightarrow} \frac{\$.90}{6} = \$.15/\text{carton}$

8-pack: $\frac{\text{price} \rightarrow}{\text{number} \rightarrow} \frac{\$1.12}{8} = \$.14/\text{carton}$

The 8-pack has the lowest unit price.



6-pack
$0.90



8-pack
$1.12

Find each unit rate.

1. $91 in 14 h

   _____

2. 372 mi in 6 h

   _____

3. $13.14 for 12 gal

   _____

4. 570 gal in 60 min

   _____

5. 54¢ for 4 oz

   _____

6. 592 words in 8 min

   _____

7. A 12 fl oz bottle of shampoo costs $1.08 at Discount Mart. A 20 fl oz bottle of the same shampoo costs $2.20 at Super Store. Find each unit rate and determine which is the better buy.

   12 fl oz bottle: _____

   20 fl oz bottle: _____

   Better buy: _____

8. A school bus travels 53.3 mi on 6.5 gal of gas on its way to a museum for a field trip. On the return trip it takes the freeway and travels 53.2 mi on 5.6 gal of gas. Find the gas mileages of each trip and determine which is greater.

   To the museum: _____

   Returning from the museum: _____

   Better mileage: _____

Name _____ Class _____ Date _____

Practice 6-1 Ratios and Unit Rates

Find each unit rate.

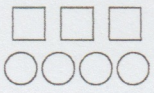
1. 78 mi on 3 gal _____
2. $52.50 in 7 h _____
3. 416 mi in 8 h _____
4. 9 bull's eyes in 117 throws _____

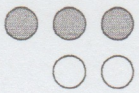
Write each ratio as a fraction in simplest form.

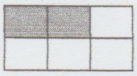
5. 7th-grade boys to 8th-grade boys _____
6. 7th-grade girls to 7th-grade boys _____
7. 7th graders to 8th graders _____
8. boys to girls _____
9. girls to all students _____

	Boys	Girls
7th Grade	26	34
8th Grade	30	22

Write three different ratios for each model.

10. 

11. 

12. 

_____ _____ _____

Write each ratio as a fraction in simplest form.

13. 7 : 12 _____
14. 3 is to 6 _____
15. 10 : 45 _____
16. 32 out of 40 _____
17. 36 is to 60 _____
18. 13 out of 14 _____
19. 9 out of 21 _____
20. 45 : 63 _____
21. 24 is to 18 _____
22. 15 out of 60 _____

Name _____ Class _____ Date _____

Reteaching 6-2 Proportions

Solve $\frac{x}{6} = \frac{10}{4}$

Method 1: Multiplication Property of Equality

$\frac{x}{6} = \frac{10}{4}$

$\frac{x}{6} \cdot 6 = \frac{10}{4} \cdot 6$ Multiply each side by 6.

$x = \frac{60}{4}$ Simplify.

$x = 15$

Method 2: cross products

$\frac{x}{6} \times \frac{10}{4}$

$4x = 60$ Find the cross products.

$\frac{4x}{4} = \frac{60}{4}$ Divide each side by 4.

$x = 15$ Simplify.

Solve each proportion. When necessary, round to the nearest hundredth.

1. $\frac{6}{p} = \frac{18}{42}$ _____

2. $\frac{12}{21} = \frac{x}{14}$ _____

3. $\frac{y}{9} = \frac{26}{6}$ _____

4. $\frac{x}{9} = \frac{7}{12}$ _____

5. $\frac{63}{t} = \frac{14}{16}$ _____

6. $\frac{28}{15} = \frac{y}{25}$ _____

7. $\frac{7}{20} = \frac{e}{70}$ _____

8. $\frac{8}{3} = \frac{40}{k}$ _____

9. $\frac{m}{54} = \frac{5}{12}$ _____

10. $\frac{8}{w} = \frac{5}{24}$ _____

11. $\frac{63}{18} = \frac{14}{z}$ _____

12. $\frac{a}{70} = \frac{2}{5}$ _____

13. $\frac{5}{13} = \frac{20}{r}$ _____

14. $\frac{6}{t} = \frac{7}{56}$ _____

15. $\frac{c}{21} = \frac{6}{20}$ _____

16. $\frac{10}{e} = \frac{15}{27}$ _____

Name _____ Class _____ Date _____

Practice 6-2 Proportions

Write a proportion for each phrase. Then solve. When necessary, round to the nearest hundredth.

1. 420 ft^2 painted in 36 min; f ft^2 painted in 30 min

_____

2. 75 points scored in 6 games; p points scored in 4 games

_____

3. 6 apples for \$1.00; 15 apples for d dollars

_____

Tell whether each pair of ratios forms a proportion.

4. $\frac{3}{4}$ and $\frac{9}{12}$ _____

5. $\frac{25}{40}$ and $\frac{5}{8}$ _____

6. $\frac{8}{12}$ and $\frac{14}{21}$ _____

7. $\frac{13}{15}$ and $\frac{4}{5}$ _____

8. $\frac{4}{5}$ and $\frac{5}{6}$ _____

9. $\frac{49}{21}$ and $\frac{28}{12}$ _____

Solve each proportion. Where necessary, round to the nearest tenth.

10. $\frac{3}{5} = \frac{15}{x}$ _____

11. $\frac{15}{30} = \frac{n}{34}$ _____

12. $\frac{h}{36} = \frac{21}{27}$ _____

13. $\frac{11}{6} = \frac{f}{60}$ _____

14. $\frac{26}{15} = \frac{130}{m}$ _____

15. $\frac{36}{j} = \frac{7}{20}$ _____

16. $\frac{r}{23} = \frac{17}{34}$ _____

17. $\frac{77}{93} = \frac{x}{24}$ _____

18. At Discount Copy, 12 copies cost \$0.66. Melissa needs 56 copies. How much should they cost?

_____

19. You estimate that you can do 12 math problems in 45 min. How long should it take you to do 20 math problems?

_____

Name _____ Class _____ Date _____

Reteaching 6-3 Similar Figures and Scale Drawings

Similar triangles have the same shape but not necessarily the same size. In the figures, $\triangle ABC$ is similar to $\triangle DEF$.

The symbol $\sim$ means "is similar to." $\triangle ABC \sim \triangle DEF$.

The lengths of the sides of similar triangles are always proportional to each other.

Find EF.

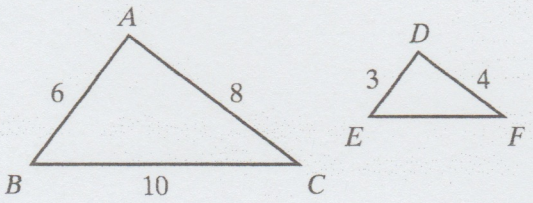
Substitute into $\frac{AC}{DF} = \frac{BC}{EF}$.

$\frac{8}{4} = \frac{10}{x}$ Write a proportion.

$8x = 40$ Find the cross products.

$\frac{8x}{8} = \frac{40}{8}$ Divide each side by 8.

$x = 5$ Simplify.



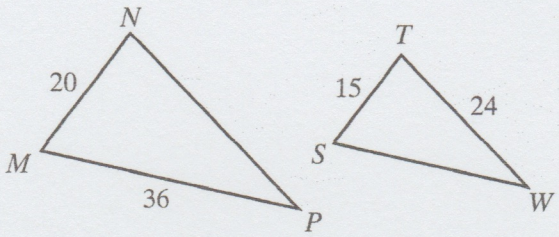
Use the properties of similar triangles to calculate the side lengths in each problem.

1. $\triangle MNP \sim \triangle STW$.

a. Complete: $\frac{MN}{ST} = \frac{MP}{\quad}; \frac{MN}{ST} = \frac{\quad}{TW}$

b. Substitute the correct lengths in the above proportions and solve.

$\frac{20}{15} = \frac{36}{SW}; \frac{\quad}{\quad} = \frac{\quad}{\quad}$

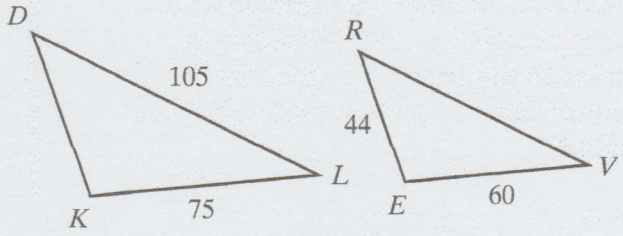


$SW =$ _____ $NP =$ _____

2. $\triangle DKL \sim \triangle REV$.

$DK =$ _____

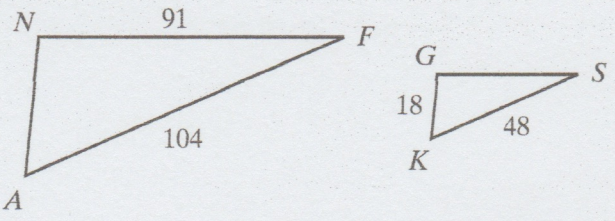
$RV =$ _____



3. $\triangle ANF \sim \triangle KGS$.

$AN =$ _____

$GS =$ _____



Name _____ Class _____ Date _____

Practice 6-3 Similar Figures and Scale Drawings

The scale of a map is $\frac{1}{2}$ in. : 8 mi. Find the actual distance for each map distance.

1. 2 in. _____

2. 5 in. _____

3. $3\frac{1}{2}$ in. _____

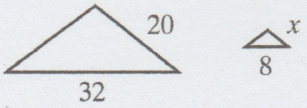
4. 10 in. _____

5. 8 in. _____

6. $7\frac{1}{4}$ in. _____

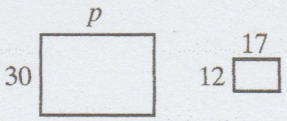
Each pair of figures is similar. Find the missing length. Round to the nearest tenth where necessary.

7.



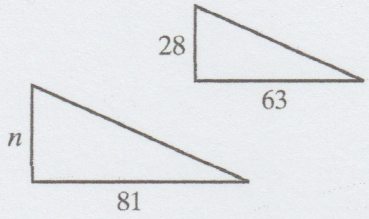
$x =$ _____

8.



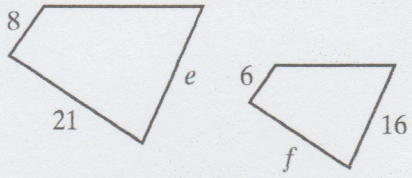
$p =$ _____

9.



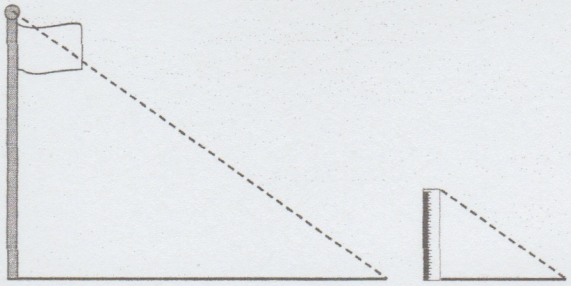
$n =$ _____

10.



$e \approx$ _____ $f \approx$ _____

11. A meter stick casts a shadow 1.4 m long at the same time a flagpole casts a shadow 7.7 m long. The triangle formed by the meterstick and its shadow is similar to the triangle formed by the flagpole and its shadow. How tall is the flagpole?



_____

A scale drawing has a scale of $\frac{1}{4}$ in. : 6 ft. Find the length on the drawing for each actual length.

12. 18 ft _____

13. 66 ft _____

14. 204 ft _____

Name _____ Class _____ Date _____

Reteaching 6-4 Probability

Suppose you select a letter at random from the words MIDDLE SCHOOL. Find $P(\text{L})$ and $P(\text{not L})$.

First determine the number of possible outcomes. There are 12 letters in the two words, so there are 12 possible outcomes when you select a letter at random. Next determine the number of favorable outcomes for $P(\text{L})$. There are two L's.

Thus, $P(\text{L}) = \frac{\text{number of favorable outcomes}}{\text{number of possible outcomes}} = \frac{2}{12} = \frac{1}{6}$

You can find $P(\text{not L})$ several ways. Since there are 12 possible outcomes and 2 are L, $12 - 2 = 10$ are not L.

Thus, $P(\text{not L}) = \frac{\text{number of favorable outcomes}}{\text{number of possible outcomes}} = \frac{10}{12} = \frac{5}{6}$

Also $P(\text{not L}) = 1 - P(\text{L})$

$= 1 - \frac{1}{6} = \frac{5}{6}$

A drawer contains 6 red socks, 4 blue socks, and 14 white socks. A sock is pulled from the drawer at random. Find the probability for each case.

1. $P(\text{red})$ _____
2. $P(\text{blue})$ _____
3. $P(\text{red or white})$ _____
4. $P(\text{red, white, or blue})$ _____
5. $P(\text{not red})$ _____
6. $P(\text{green})$ _____

Suppose you spin a spinner that is equally likely to land on any one of the numbers from 1 to 20. Find the probability for each event.

7. $P(17)$ _____
8. $P(\text{an odd number})$ _____
9. $P(\text{a number divisible by 5})$ _____
10. $P(26)$ _____
11. $P(\text{a number with a 1 in it})$ _____
12. $P(\text{a prime number})$ _____
13. $P(\text{a number less than 6})$ _____
14. $P(\text{a number})$ _____
15. $P(\text{a number that is not less than 17})$ _____
16. $P(\text{a number divisible by 3 or 4})$ _____

Name _____ Class _____ Date _____

Practice 6-4 Probability

Find each probability for choosing a letter at random from the word PROBABILITY.

1. $P(\text{B})$ _____
2. $P(\text{P})$ _____
3. $P(\text{A or I})$ _____
4. $P(\text{not P})$ _____

A child is chosen at random from the Erb and Smith families. Find the odds in favor of each of the following being chosen.

5. a girl _____
6. an Erb _____
7. an Erb girl _____
8. a Smith girl _____
9. not a Smith boy _____
10. a Smith _____

	Erb family	Smith family
Girls	2	5
Boys	4	3

A box contains 7 red, 14 yellow, 21 green, 42 blue, and 84 purple marbles. A marble is drawn at random from the box. Find each probability.

11. $P(\text{red})$ _____
12. $P(\text{yellow})$ _____
13. $P(\text{green or blue})$ _____
14. $P(\text{purple, yellow, or red})$ _____
15. P(not green) _____
16. P(not purple, yellow, or red) _____

Find the odds in favor of each selection when a marble is chosen at random from the box described above.

17. blue _____
18. purple _____
19. not red _____
20. not green or blue _____
21. yellow _____
22. not purple or yellow _____

Name _____ Class _____ Date _____

Reteaching 6-5 Fractions, Decimals, and Percents

Write $\frac{7}{8}$ as a percent and 64% as a fraction in lowest terms.

Divide $7 \div 8$.

$$\begin{array}{r} 0.875 \\ 8\overline{)7.000} \\ \underline{64} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$\frac{7}{8} = 0.875$

$0.875 = 87.5\%$

Thus $\frac{7}{8} = 87.5\%$.

64% means 64 parts per 100.

$64\% = \frac{64}{100}$

$= \frac{2^4}{2^2 \cdot 5^2}$

$= \frac{16}{25}$

Thus $64\% = \frac{16}{25}$.

Write each fraction as a percent.

1. $\frac{7}{10}$ _____
2. $\frac{3}{5}$ _____
3. $\frac{11}{20}$ _____
4. $\frac{17}{25}$ _____
5. $\frac{1}{5}$ _____
6. $\frac{39}{100}$ _____
7. $\frac{1}{20}$ _____
8. $\frac{13}{50}$ _____
9. $\frac{5}{8}$ _____
10. $\frac{3}{16}$ _____

Write each percent as a fraction in simplest terms.

11. 15% _____
12. 12.5% _____
13. 76% _____
14. 14% _____
15. 60% _____
16. 97% _____
17. 25% _____
18. 30% _____
19. 82% _____
20. 68.75% _____

Name _____ Class _____ Date _____

Practice 6-5 Fractions, Decimals, and Percents

Write each decimal or fraction as a percent. Round to the nearest tenth of a percent where necessary.

1. 0.16 _____
2. 0.72 _____
3. $\frac{24}{25}$ _____
4. $\frac{31}{40}$ _____
5. $\frac{111}{200}$ _____
6. $\frac{403}{1{,}000}$ _____
7. 3.04 _____
8. 5.009 _____
9. 0.0004 _____
10. $\frac{40}{13}$ _____
11. $\frac{4}{7}$ _____
12. $\frac{57}{99}$ _____

Write each percent as a decimal.

13. 8% _____
14. 12.4% _____
15. 145% _____
16. 0.07% _____
17. $7\frac{1}{2}\%$ _____
18. $15\frac{1}{4}\%$ _____

Write each percent as a fraction or mixed number in simplest form.

19. 60% _____
20. 5% _____
21. 35% _____
22. 32% _____
23. 140% _____
24. 0.8% _____

Use >, <, or = to complete each statement.

25. 0.7 ☐ 7%
26. 80% ☐ $\frac{4}{5}$
27. $\frac{1}{3}$ ☐ 33%

28. In the United States in 1990, about one person in twenty was 75 years old or older. Write this fraction as a percent.

_____

Name _____ Class _____ Date _____

Reteaching 6-6 Proportions and Percents

What percent of 98 is 24.5?

You can solve percent problems by writing and solving a proportion.

Any percent problem of the form x% of a is b can be written as:

$\frac{x}{100} = \frac{b}{a}$

so $\frac{x}{100} = \frac{24.5}{98}$ Write a proportion.

$98x = 2{,}450$ Write cross products.

$\frac{98x}{98} = \frac{2{,}450}{98}$ Divide each side by 98.

$x = 25$ Simplify.

24.5 is 25% of 98.

Write a proportion. Then solve. Where necessary, round to the nearest tenth or tenth of a percent.

1. What percent of 75 is 60?

2. What percent of 68 is 51?

3. What percent is 17 of 25?

4. What percent of 51 is 65?

5. What percent of 144 is 126?

6. What percent of 95 is 25?

7. Find 24% of 120.

8. Find 75% of 76.

9. Find 260% of 30.

10. Find $27\frac{1}{2}$% of 96.

11. Find 38% of 32.

12. Find 17% of 85.

13. 40% of x is 28. What is x?

14. 9% of k is 27. What is k?

15. 75% of p is 12. What is p?

16. 0.9% of h is 276. What is h?

17. 13% of r is 209. What is r?

18. 68% of j is 44. What is j?

Name _____ Class _____ Date _____

Practice 6-6 Proportions and Percents

Write a proportion. Then solve. Where necessary, round to the nearest tenth or tenth of a percent.

1. $62\frac{1}{2}\%$ of t is 35. What is t? _____
2. 38% of n is 33.44. What is n? _____
3. 120% of y is 42. What is y? _____
4. 300% of m is 600. What is m? _____
5. 1.5% of h is 12. What is h? _____
6. What percent of 40 is 12? _____
7. What percent of 48 is 18? _____
8. What percent is 54 of 60? _____
9. What percent is 39 of 50? _____
10. Find 80% of 25. _____
11. Find 150% of 74. _____
12. Find 44% of 375. _____
13. Find 65% of 180. _____
14. The Eagles won 70% of the 40 games that they played. How many games did they win?

    _____

15. Thirty-five of 40 students surveyed said that they favored recycling. What percent of those surveyed favored recycling?

    _____

16. Candidate Carson received 2,310 votes, 55% of the total. How many total votes were cast?

    _____

Name _____ Class _____ Date _____

Reteaching 6-7 Percents and Equations

You can solve percent problems by writing and solving an equation.

8 is 16% of what?

$8 = 0.16 \cdot n$ Write an equation. Write the percent as a decimal.

$\frac{8}{0.16} = \frac{0.16n}{0.16}$ Divide each side by 0.16.

$50 = n$ Simplify

8 is 16% of 50.

Write and solve an equation. Where necessary, round to the nearest tenth or tenth of a percent.

1. What percent is 84 of 60?

2. What percent of 40 is 26?

3. What percent is 22 of 33?

4. What percent of 32 is 28?

5. What percent is 18 of 48?

6. What percent of 81 is 18?

7. Find 37.5% of 104.

8. Find 0.4% of 25.

9. Find 68% of 150.

10. Find 180% of 65.

11. Find 12.5% of 56.

12. Find 86% of 55.

13. 95% of h is 60. What is h?

14. 24% of m is 17. What is m?

15. 30% of n is 42. What is n?

16. 28% of b is 49. What is b?

17. 25% of y is 96. What is y?

18. 72% of k is 234. What is k?

Name _____ Class _____ Date _____

Practice 6-7 Percents and Equations

Write and solve an equation. Where necessary, round to the nearest tenth or tenth of a percent.

1. What percent of 25 is 17? _____
2. What percent is 10 of 8? _____
3. What percent is 63 of 84? _____
4. What percent is 3 of 600? _____
5. Find 45% of 60. _____
6. Find 325% of 52. _____
7. Find $66\frac{2}{3}$% of 87. _____
8. Find 1% of 3,620. _____
9. $62\frac{1}{2}$% of x is 5. What is x? _____
10. 300% of k is 42. What is k? _____
11. $33\frac{1}{3}$% of p is 19. What is p? _____
12. 70% of c is 49. What is c? _____
13. 15% of n is 1,050. What is n? _____
14. 38% of y is 494. What is y? _____
15. A camera regularly priced at $295 was placed on sale at $236. What percent of the regular price was the sale price?

    _____
16. Nine hundred thirty-six students, 65% of the entire student body, attended the football game. Find the size of the student body.

    _____

Name _____ Class _____ Date _____

Reteaching 6-8 Percent of Change

Find the percent of decrease from 85 to 60.

Find the amount of decrease.

$85 - 60 = 25$

$$\text{percent of decrease} = \frac{\text{amount of decrease}}{\text{original amount}}$$
$$= \frac{25}{85}$$
$$\approx 0.294 = 29.4\%$$

The percent of decrease is about 29.4%

Find each percent of increase. Where necessary, round to the nearest tenth of a percent.

1. 40 is increased to 45.

_____

2. 33 is increased to 55.

_____

3. 15 is increased to 34.

_____

4. 11 is increased to 88.

_____

5. 72 is increased to 117.

_____

6. 28 is increased to 49.

_____

7. 35 is increased to 49.

_____

8. 48 is increased to 132.

_____

Find each percent of decrease. Where necessary, round to the nearest tenth of a percent.

9. 60 is decreased to 15.

_____

10. 56 is decreased to 35.

_____

11. 140 is decreased to 77.

_____

12. 96 is decreased to 64.

_____

13. 99 is decreased to 69.

_____

14. 50 is decreased to 44.

_____

15. 83 is decreased to 0.

_____

16. 475 is decreased to 152.

_____

Name _____ Class _____ Date _____

Practice 6-8 Percent of Change

Find each percent of change. Round to the nearest tenth of a percent. Tell whether the change is an increase or a decrease.

1. 24 to 21 _____
2. 64 to 80 _____
3. 100 to 113 _____
4. 50 to 41 _____
5. 63 to 105 _____
6. 42 to 168 _____
7. 80 to 24 _____
8. 200 to 158 _____
9. 56 to 71 _____
10. 127 to 84 _____
11. 20 to 24 _____
12. 44 to 22 _____
13. 16 to 12 _____
14. 10 to 100 _____
15. 20 to 40 _____
16. 10 to 50 _____
17. 12 to 16 _____
18. 80 to 100 _____
19. 69 to 117 _____
20. 19 to 9 _____
21. 95 to 145 _____
22. 88 to 26 _____

23. Mark weighed 110 pounds last year. He weighs 119 pounds this year. What is the percent of increase in his weight, to the nearest tenth of a percent?

_____

24. Susan had $140 in her savings account last month. She added $20 this month and earned $.50 interest. What is the percent of increase in the amount in her savings account to the nearest tenth of a percent?

_____

25. The population density of California was 151.4 people per square mile in 1980. By 1990 it had increased to 190.8 people per square mile. Find the percent increase to the nearest percent.

_____

Name _____ Class _____ Date _____

Reteaching 6-9 Markup and Discount

A store pays $8 for a basketball. The markup is 60%. Later, they discount the basketball 25%. Find the original selling price and the sale price of the basketball.

Method 1

The markup is 60% of the cost.
Find 60% of $8.
0.6(8) = $4.80
Store's cost + markup = selling price
8 + 4.80 = $12.80
The original selling price is $12.80.

The discount is 25% of the original selling price.
Find 25% of $12.80
0.25(12.80) = 3.20
original price − discount = sale price
12.80 − 3.20 − 9.60
The sale price is $9.60

Method 2

The selling price equals 100% of the cost plus 60% (the markup) of the cost, or 160%.
Find 160% of $8.
1.60(8) = $12.80
The original selling price is $12.80.

The sale price is 100% of the original price minus 25% of the original price, or 75%.
Find 75% of $12.80
0.75(12.80) = $9.60
The sale price is $9.60

Complete each table. Where necessary, round to the nearest cent.

	Cost	Markup	Selling Price
1.	$17	50%	
2.	$48	70%	
3.	$110	85%	
4.	$87	65%	
5.	$335	35%	

	Original Selling Price	Discount	Sale Price
6.	$19	25%	
7.	$136	15%	
8.	$849	30%	
9.	$29.99	40%	
10.	$2.59	35%	

Name _____ Class _____ Date _____

Practice 6-9 Markup and Discount

Find each sale price. Round to the nearest cent where necessary.

	Regular Price	Percent of Discount	Sale Price
1.	$46	25%	
2.	$35.45	15%	
3.	$174	40%	
4.	$1.40	30%	
5.	$87	50%	
6.	$675	20%	

Find each selling price. Round to the nearest cent where necessary.

	Cost	Percent Markup	Selling Price
7.	$5.50	75%	
8.	$25	50%	
9.	$170	85%	
10.	$159.99	70%	
11.	$12.65	90%	
12.	$739	20%	

13. A company buys a sweater for $14 and marks it up 90%. It later discounts the sweater 25%.

a. Find the selling price of the sweater after markup.

_____

b. How much was the discount?

_____

c. Find the sale price after the discount.

_____

d. The company's profit on the sweater can be found by subtracting the final selling price minus the cost. What was the company's profit on the sweater?

_____

e. The profit was what percent of the cost?

_____

Name _____ Class _____ Date _____

Reteaching 6-10 Make a Table

A saving account pays 4% interest per year. You deposit $1,000 and then do not deposit or withdraw any money. How much will be in the account at the end of 5 years?

A table can help you solve the problem.

Year	Beginning Balance	Interest	Ending Balance
1	$1,000	$40	$1,040
2	$1,040	$41.60	$1,081.60
3	$1,081.60	$43.26	$1,124.86
4	$1,124.86	$44.99	$1,169.85
5	$1,169.85	$46.79	$1,216.64

The first year, your interest is 4% of $1,000 or $40. At the end of the first year and the beginning of the second year, you have $1,040. The second year, your interest is 4% of $1,040 or $41.60. If you finish the table, you find you have $1,216.64 at the end of 5 years.

A savings account pays 5% interest per year. You deposit $1,800 and then do not deposit or withdraw any money. Complete the table to find out how much will be in the account at the end of 10 years.

	Year	Beginning Balance	Interest	Ending Balance
1.	1	$1,800		
2.	2			
3.	3			
4.	4			
5.	5			
6.	6			
7.	7			
8.	8			
9.	9			
10.	10			

Amount: _____

Name _____ Class _____ Date _____

Practice 6-10 Make a Table

Make a table to solve each problem.

1. A car was worth $12,500 in 1998. Its value depreciates, or decreases, 15% per year. Find its value in 2002.

Year	1998	1999	2000	2001	2002
Car's Value	$12,500				

2. Marcus spent $105 on 6 items at a sale. Videotapes were on sale for $15 each and music CDs were on sale for $20 each. How many of each item did Marcus buy?

Number of Videotapes	1	2	3	4	5
Number of CD's	5	4	3	2	1
Total Cost					

_____

3. Karina likes to mix either apple, orange, or grape juice with either lemon-lime soft drink or sparkling water to make a fizz. How many different fizzes can she make?

_____

4. How many ways can you have 25 cents in change?

_____

5. The deer population of a state park has increased 8% a year for the last 4 years. If there are 308 deer in the park this year, find how large the population was 4 years ago by completing the table.

Year		1	2	3	4
Deer Population					308

6. How many different sandwiches can you make from 3 types of bread, 2 types of cheese, and 2 types of meat? Assume that only one type of each item is used per sandwich.

_____

7. A bus leaves a station at 8:00 A.M. and averages 30 mi/h. Another bus leaves the same station following the same route two hours after the first and averages 50 mi/h. When will the second bus catch up with the first bus?

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