Name _____ Date _____ Class _____

SECTION 6A

Ready to Go On? Skills Intervention

6-5 Solving Percent Problems

Percents can be used in the real world to calculate amounts such as tips, discounts, and sales tax.

To find the tip, multiply the amount of the bill by the percent of the tip. To find the amount of discount of an item, multiply the regular price by the percent of the discount. To find the amount of sales tax, multiply the cost of the item by the percent of sales tax.

Calculating Tips

Sharon is buying lunch for herself and her mother. The bill comes to $27. How much should she leave in total if she leaves a 15% tip?

_____ of $27	Restate the problem.
15% ___ 27	What operation should you use for "of"? _____
_____ 27	Change the percent to a _____.
_____	Multiply.
27 + _____ = _____	Add the _____ amount to the bill.

Sharon should leave _____.

Finding Discounts

A bike is on sale for 25%. Its regular price is $150. What is the sale price?

25% off 150	Restate the problem
25% ___ 150	Find 25% of 150.
_____ 150	Convert the percent to a _____.
_____	_____ to find the amount of the discount.
150 _____ = _____	_____ to find the sale price of the bike.

The bike is on sale for _____.

Finding Sales Tax

Carrie bought a magazine for $4.99 and paid $0.29 in sales tax. What was the sales tax rate?

_____t = _____	Restate the problem.
$t \approx$ _____	_____ both sides by 4.99.
0.058 = _____	Convert the decimal to a _____.

Name _____ Date _____ Class _____

SECTION 6A

Ready to Go On? Problem Solving Intervention

6-5 Solving Percent Problems

You can write equations to represent situations involving percents.

You buy a pair of pants and a shirt that are on sale. What percent do you save?

Shirts – Reg. $15, Now 40% off
Pants – Reg. $35, Now 20% off

Understand the Problem

1. What are the regular prices of the shirt and pants? Do you get the same percent discount on both?

_____

2. Rewrite the question as a statement.

_____

Make a Plan

3. Complete the equations to show *s* and *p*, the number of dollars you save on the shirt and the number of dollars you save on the pants.

s = _____% of _____ *p* = _____% of _____

4. How can you find the total number of dollars you save? _____

5. If you know how many dollars you saved, what else do you need to know to compute the overall percent you saved?

_____

Solve

6. Use the equations from Exercise 3 to find *s* and *p*. Then find the total savings.

_____

7. At regular prices, how much would the pants and shirt cost in all? _____

8. What percent do you save? _____

Check

9. Why does it make sense that the overall percent is closer to 20% than to 40%?

_____

_____