CONCEPT SUMMARY *For Your Notebook*

Types of Percent Problems

Percent problem	Example	Equation
Find a percent.	What percent of 136 is 51?	$51 = p\% \cdot 136$
Find part of a base.	What number is 15% of 88?	$a = 15\% \cdot 88$
Find a base.	20 is 12.5% of what number?	$20 = 12.5\% \cdot b$

3.7 EXERCISES

HOMEWORK KEY

○ = **WORKED-OUT SOLUTIONS** on p. WS1 for Exs. 13 and 35

= **TAKS PRACTICE AND REASONING** Exs. 19, 31, 38, 39, 41, and 42

SKILL PRACTICE

1. VOCABULARY Identify the percent, the base, and the part of the base in the following statement: 54 is 15% of 360.

2. WRITING Rewrite the statement "28 is 35% of 80" in the form $\frac{a}{b} = \frac{p}{100}$. *Explain* how you identified the values of a, b, and p.

EXAMPLE 1 on p. 176 for Exs. 3–8

USING PROPORTIONS **Use a proportion to answer the question.**

3. What percent of 75 is 27?

4. What percent of 120 is 66?

5. What number is 35% of 80?

6. What number is 60% of 85?

7. 81 is 54% of what number?

8. 42 is 200% of what number?

EXAMPLES 2, 3, and 4 on pp. 177–178 for Exs. 9–21

USING THE PERCENT EQUATION **Use the percent equation to answer the question.**

9. What percent of 80 is 56?

10. What percent of 225 is 99?

11. What percent of 153 is 9.18?

12. What number is 18% of 150?

13. What number is 115% of 60?

14. What number is 82% of 215?

15. 7 is 28% of what number?

16. 189 is 90% of what number?

17. 41.8 is 44% of what number?

18. 71.5 is 52% of what number?

19. **TAKS REASONING** What number is 87.5% of 512?

(A) 5.85 (B) 448 (C) 585 (D) 4480

ERROR ANALYSIS ***Describe*** **and correct the error in answering the question.**

20. What percent of 95 is 19?

$95 = p\% \cdot 19$

$5 = p\%$

$500\% = p\%$ ✗

21. 153 is 76.5% of what number?

$153 = 76.5\% \cdot b$

$153 = 76.5 \cdot b$

$2 = b$ ✗