WORD PROBLEMS

Solve each word problem. Show the proper steps: write a statement identifying the quantity that your variable represents, write an equation that describes the problem, solve the equation, and then write your answer in English words.

1. The sum of a number and 10 is -17. Find the number.

2. The quotient of a number and 7 is -3. Find the number.

3. The product of a number and -8 is 112. Find the number.

4. The difference of a number and 7 is -12. Find the number.

5. The difference of a number and -8 is 17. Find the number.

6. The difference of four times a number and 8 is 16. Find the number.

7. Five times the sum of a number and 7 is 30. Find the number.

8. The length of a rectangle is five inches more than the width. The perimeter is 34 in. Find the length and width.

9. The width of a rectangle is three feet less than the length. The perimeter is 10 ft. Find the length and width.

10. Jose is four years older than Lupe. Five years ago the sum of their ages was 28. How old are they now?

11. Tim is five years older than Joann. Joann is four years older than Stacey. The sum of their ages is 43. Find Stacey's age.

12. One angle of a triangle is twice another. The third angle is three times the smallest. Find the angles.

ANSWERS: **1.** The number is –27 **2.** The number is –21 **3.** The number is –14.
4. The number is –5. **5.** The number is 9. **6.** The number is 6. **7.** The number is –1.
8. The width is 6ft and the length is 11ft. **9.** The length is 4 ft. and the width is 1 ft.
10. Jose is 21 and Lupe is 17. **11.** Joann is 14, Tim is 19, and Stacy is 10. **12.** The angles are 30°, 60°, and 90°.