DIGITAL



5. Larry has written 4 fewer pages of a group assignment than Roger. Together, the boys have written 26 pages.

p + (p - 4) = 26

7. In a rectangle, the length is four more than twice the width. The area of the rectangle is 160 cm^2 . (Hint: the formula for the area of a rectangle is A = Iw.)

w(2w + 4) = 160

Solve.

9. A photographer charges \$4.30 per pose. How many poses were done if the total charge was \$55.90?

13

11. The sum of two consecutive integers is -89. What are the two integers?

-45, -44

13. A customer left a 15% tip at a restaurant. What © 2003 BestQuest was the price of the meal, before tip, if the amount of the tip was \$8.16?

\$54.40

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monotype composition____

- $h+\left(\frac{1}{2}h+3\right)=90$
- 6. The sum of triple a number and three is equivalent to fifteen less than the number.

3x + 3 = x - 15

8. Louie did h of his 26 homework problems and has 12 left.

26 - h = 12 or h + 12 = 26

10. Angle *D* has a measure 30° less than half that of its supplement. Find the measure of the supplement of angle D.

140°

12. The sum of two consecutive odd integers is 228. What are the two integers?

113, 115

14. After a 35% employee discount, Rhonda paid \$62.40 for a pair of boots. What was the regular price of the boots?

\$96

93

15. A bike shop has a 40% markup on all its bikes. What is the wholesale cost of a bike that retails for \$322?

\$230

17. In a triangle, the first side is 4 in. longer than the second side. The third side is 6 in. shorter than the second side. What is the length of the shortest side if the perimeter is 31 in.?

5 in.

19. In an isosceles triangle, the measure of each base angle is 30° less than the measure of the vertex angle. Find the measure of each base angle.

50°

3 lb

21. Mark is adding peanuts to 2 pounds of trail mix that is 20% peanuts. How many pounds of peanuts should he add so that the mixture is 68% peanuts?

16. In a rectangle, the length is four more than the width. What is the length of the rectangle if its perimeter is 80 ft?

22 ft

18. An online DVD rental service charges a membership fee of \$12.50 plus \$6.25 per rental. How many rentals were made if the total amount spent was \$181.25?

27

20. Theo bought twice as many 3¢ stamps as 5¢ stamps. How many of each type did he buy if the total value of the stamps was 77¢?

fourteen 3¢ stamps; seven 5¢ stamps

22. There are 5 ounces of a 20% oil solution. How many ounces of 100% oil do you need to add in order to get an 80% oil solution?

15 ounces

- **23.** A car traveled the first leg of a 130-mile trip at 55 mph, then completed the trip at 40 mph. How long did the car travel at 55 mph if the entire trip took 2.5 hours?
 - **A.** Draw a picture that can help you solve this problem.



B. Write an equation to solve this problem. 55x + 40(2.5 - x) = 130

- **C.** Identify what the variable stands for. **x** is the time traveled at 55 mph.
- **D.** Solve the problem. Be sure to answer the question, and then show how to check your answer.

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55x + 40(2.5 - x) = 130

55x + 100 - 40x = 130

15x + 100 = 130

15x = 30

x = 2

2.5 - x = 0.5

The car traveled at 55 mph for two

hours.
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Check:

distance driven at 55 mph = 55(2) = 110 mi + distance driven at 40 mph = 40(0.5) = 20 mi total distance driven = 130 mi



Module 4

Test B

monotype composition