

Name _____

3-5B Lesson Master**Questions on SPUR Objectives**

See pages 178–179 for objectives.

SKILLS Objective A

In 1–15, solve and check. Show your work.

1. $8x + -12x = 32$

2. $-41 = 6x + 7 - 18x$

3. $3(a + 10) = 15$

4. $\frac{5}{6}(12 - 5b) = 35$

5. $10 = \frac{2}{3}m - \frac{3}{2}m$

6. $\frac{2}{9}n + n = 4\frac{8}{9}$

7. $3.4c - (5c + 1) = -12.2$

8. $0.45(d - 1.2) + 0.67 = 5.53$

9. $-9e + 3.1 + 5e - 7.1 = 8$

10. $6(x - 1) - (x + 2) = -18$

11. $15 - 3(2 - f) - f = 19$

12. $99 = \frac{3}{8}(g + 2) + 12(g + 2)$

13. $-12 = -(3h - 1) + 4(2 - h)$

14. $7(k + 3) - 6(k + 3) = -6$

15. $6.1(x - 8) + 2.3(8 - x) = 7.6$

Name _____

3-5B

page 2

USES Objective D

In 16–20, a situation is given.

- a. Write an equation to describe the situation and identify what the variable represents if necessary.
- b. Solve the equation and answer the question.

16. Braden, Brooke, and Brett work at a bike shop. Braden works h hours a week. Brooke works 5 more hours than Braden in a week. Brett works twice as many hours as Braden in a week. How many hours does Braden work in a week if altogether they work a total of 33 hours?

a. _____

b. _____

17. Nancy has 60 feet of fencing to enclose a run for her dog, Daisy. She wants the run to be twice as long as it is wide. What dimensions should she use for the dog run?

a. _____

b. _____

18. Philip purchased s pairs of shoes for the school year. He also purchased jeans and T-shirts. The number of pairs of jeans is 3 more than the number of pairs of shoes and the number of T-shirts is twice as many as the number of pairs of jeans. How many shoes did he purchase if he purchased a total of 17 items?

a. _____

b. _____

19. Gary is planning to build a wooden deck shaped like a trapezoid. For cost reasons, he wants the area to be 240 square feet. The height of the trapezoid will be 12 feet and the shorter side will be 16 feet shorter than the longer side. Use the formula $A = 0.5h(b_1 + b_2)$ to find the length of the shorter and longer sides of the deck.

a. _____

b. _____

20. A deck is built around a pool. What is the value of x if the perimeter of the deck is 84 feet?

a. _____

b. _____

