

Name _____

6-1B Lesson Master

Questions on SPUR Objectives

See Student Edition pages 446–449 for objectives.

SKILLS Objective A

In 1–14, expand the expression.

1. $(x + 11)^2$

2. $\frac{1}{3}(3d + 6)^2$

3. $(6n - \frac{1}{2})^2$

4. $(5y - 8)^2$

5. $(c + 5)^2 - (c - 5)^2$

6. $-7(8z + 12)^2$

7. $(5g - 4h)^2$

8. $(\frac{1}{4} - b)^2$

9. $(8q - \frac{1}{2})^2$

10. $(9d + 4e)^2$

11. $3(3 + c)^2$

12. $(2x + 1)^2 + (2x - 1)^2$

13. $\frac{1}{4}(6p + 4)^2$

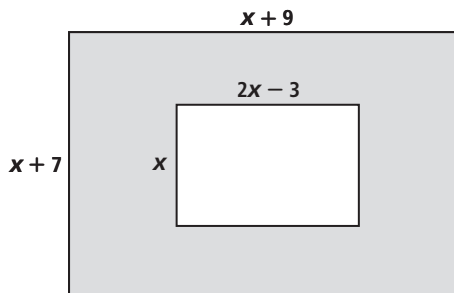
14. $-9(2k - 5)^2 - 2(k + 3)^2$

USES Objective I

In 15 and 16, use the rectangles pictured at the right.

15. Write an expression for the area of the shaded region.

16. Determine the area of the shaded region if $x = 3$ cm.



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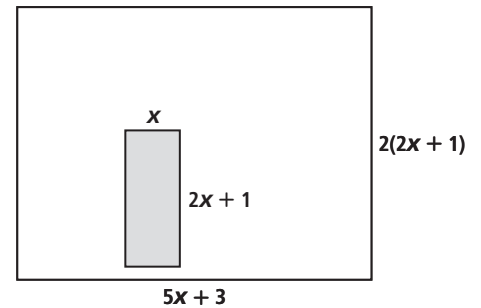
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17. Cindy has an 11" by 14" photograph that she wishes to frame. She uses matting of width w around the edge of the photograph.

- a. Give an expression for the total area of the photograph and the matting. _____
- b. If $w = 2$ in., what are the dimensions of the frame that will hold the photograph and the matting? _____
- c. What is the total area of the photograph and the matting in Part b?

18. Refer to the diagram at the right. Give the area of each region in standard form.

- a. Shaded rectangle _____
- b. Larger rectangle _____
- c. Unshaded region _____



19. Suppose a park district plans to build a rectangular playground 80 m by 60 m with a walkway w meters wide around it.

- a. At the right, draw and label a diagram to represent this situation.
- b. Write an expression in standard form for the total area of the playground and walkway.

c. Find the total area if $w = 3$. _____

20. A square and a circle have the same area. The length of one side of the square is 8 units. To the nearest hundredth, what is the radius of the circle? _____

REVIEW Lesson 5-1, Objective H

In 21 and 22, graph the solution set on the number line.

21. $y \leq 12$ and $y \geq 0$

22. $e > -2$ or $e < -11$

