

Chapter Test A

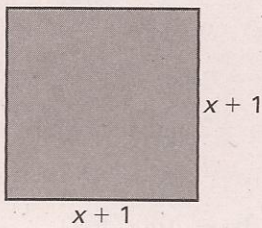
For use after Chapter 10

Find the sum or difference.

1. $(x^2 + 2x + 1) + (4x^2 + 5x + 3)$
2. $(3x^2 + 5x + 4) - (x^2 + 2x + 1)$
3. $(3x^2 + 5x + 8) + (6x^2 + 3x + 2)$
4. $(8x^2 + 6x + 3) - (4x^2 + 3x + 2)$
5. The profits of a company are found by subtracting the company's costs from its revenue. If a company's cost can be modeled by $14x + 120,000$ and its revenue can be modeled by $40x - 0.0002x^2$, what is an expression for the profit?

Find the product.

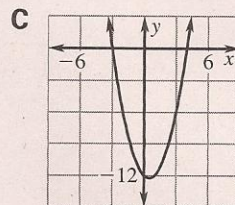
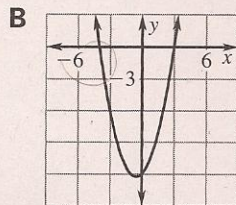
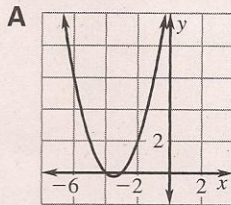
6. $2x(3x - 5)$
7. $(x + 3)(x + 2)$
8. $(2x + 1)(x + 3)$
9. $(x + 1)(x^2 + x + 1)$
10. $(x + 2)(x - 2)$
11. $(x + 5)^2$
12. Find an expression for the area of the figure.



Use the zero-product property to solve the equation.

13. $(x + 4)(x - 2) = 0$
14. $(x + 3)^2 = 0$

Match the function with its graph.



15. $y = (x - 3)(x + 4)$
16. $y = (x + 3)(x - 4)$
17. $y = (x + 3)(x + 4)$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____