

Day 9

**LESSON 4.4 Practice**  
 For use with pages 259-265

(Key)

Factor the expression. If the expression cannot be factored, say so.

1.  $3x^2 + 10x - 8$   
 $3x^2 + 12x - 2x - 8$   
 $3x(x+4) - 2(x+4)$   
 $(3x-2)(x+4)$

4.  $2x^2 - 5x + 1$   
 cannot be factored

7.  $9x^2 + 12x + 4$   
 $(3x+2)(3x+2)$   
 $(3x+2)^2$

10.  $12x^2 + 17x + 6$   
 $(3x+2)(4x+3)$

13.  $12x^2 - 39x + 9$   
 $3(4x-1)(x-3)$

16.  $42x^2 + 35x + 7$   
 $7(6x^2 + 5x + 1)$   
 $7(3x+1)(2x+1)$

2.  $2x^2 + 5x - 3$   
 $2x^2 + 6x - 1x - 3$   
 $2x(x+3) - 1(x+3)$   
 $(2x-1)(x+3)$

5.  $4x^2 + 5x - 6$   
 $(4x-3)(x+2)$

8.  $12x^2 - 24x - 9$   
 $3(4x^2 - 8x - 3)$

11.  $15x^2 + 8x - 16$   
 $(5x-4)(3x+4)$

14.  $18x^2 - 9x - 14$   
 $(3x+2)(6x-7)$

17.  $-12x^2 - x + 11$   
 $-1(12x^2 + x - 11)$   
 $-1(12x-11)(x+1)$

3.  $4x^2 + 4x + 1$   
 $4x^2 + 2x + 2x + 1$   
 $2x(2x+1) + 1(2x+1)$   
 $(2x+1)(2x+1) \rightarrow (2x+1)^2$

6.  $2x^2 + 11x + 15$   
 $(2x+5)(x+3)$

9.  $18x^2 - 2$   
 $2(9x^2 - 1)$   
 $2(3x+1)(3x-1)$

12.  $4x^2 - 5$   
 cannot be factored

15.  $20x^2 - 54x + 36$   
 $2(10x^2 - 27x + 18)$   
 $2(5x-6)(2x-3)$

18.  $80x^2 + 68x + 12$   
 $4(20x^2 + 17x + 3)$   
 $4(4x+1)(5x+3)$

Solve the equation.

19.  $2x^2 + 3x - 2 = 0$

20.  $2x^2 - 3x - 9 = 0$

21.  $4x^2 - 8x + 3 = 0$

22.  $9x^2 - 4 = 0$