

Algebra Worksheet – Section 10.5  
Factoring Polynomials of the form  
 $x^2 + bx + c$

Name \_\_\_\_\_

Block \_\_\_\_\_

Factor

1.  $x^2 + 3x + 2$

2.  $x^2 - x - 2$

3.  $x^2 + x - 6$

4.  $a^2 + a - 12$

5.  $a^2 - 2a - 35$

6.  $b^2 + 8b + 16$

7.  $b^2 + 7b - 8$

8.  $y^2 - y - 6$

9.  $x^2 - 4x - 45$

10.  $y^2 - 8y + 15$

11.  $p^2 + 12p + 27$

12.  $b^2 + 9b + 20$

13.  $b^2 + 3b - 40$

14.  $a^2 - 15a + 36$

15.  $c^2 + 11c + 18$

16.  $x^2 + 21x + 100$

Solve each equation by factoring

17.  $x^2 + 5x + 6 = 0$

18.  $b^2 - b - 20 = 0$

19.  $y^2 - y - 72 = 0$

20.  $x^2 - 12x = -11$