



Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### FACTORING POLYNOMIALS WORKSHEET ( $a = 1$ )

<b>Example:</b> $x^2 - x - 20 = (x)^2 + (4 + (-5))x + (4)(-5) = (k + 4)(k - 5)$
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Factor the following examples and write prime, if prime.

1.  $x^2 - 5x - 24$

2.  $x^2 + 8x + 12$

3.  $b^2 + 7b - 18$

4.  $y^2 - 15y + 36$

5.  $c^2 + 4c - 21$

6.  $a^2 + 12a + 27$

7.  $45 + 14y + y^2$

8.  $m^2 + 13m - 36$

9.  $x^2 - 22x - 75$

10.  $b^2 - 5b - 84$

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

12.  $y^2 - 18y + 81$

13.  $x^2 - 4x - 32$

14.  $x^2 + 21x + 54$

15.  $n^2 - 15n + 56$