

## Factoring Quadratic Expressions

Factor each completely.

1)  $x^2 - 7x - 18$

2)  $p^2 - 5p - 14$

3)  $m^2 - 9m + 8$

4)  $x^2 - 16x + 63$

5)  $7x^2 - 31x - 20$

6)  $7k^2 + 9k$

7)  $7x^2 - 45x - 28$

8)  $2b^2 + 17b + 21$

9)  $5p^2 - p - 18$

10)  $28n^4 + 16n^3 - 80n^2$

11)  $3b^3 - 5b^2 + 2b$

12)  $7x^2 - 32x - 60$

13)  $30n^2b - 87nb + 30b$

14)  $9r^2 - 5r - 10$

15)  $9p^2r + 73pr + 70r$

16)  $9x^2 + 7x - 56$

17)  $4x^3 + 43x^2 + 30x$

18)  $10m^2 + 89m - 9$

**Critical thinking questions:**

19) For what values of  $b$  is the expression factorable?  
 $x^2 + bx + 12$

20) Name four values of  $b$  which make the expression factorable:  
 $x^2 - 3x + b$