

**Homework 27.1**

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**Factor each completely.**

1)  $x^2 + 2x - 15$

2)  $k^2 + 2k + 1$

3)  $b^2 - 7b - 30$

4)  $x^2 + 15x + 56$

5)  $b^2 - 8b + 7$

6)  $m^2 + 2m - 8$

7)  $k^2 - 4$

8)  $x^2 - 16$

9)  $9b^2 - 1$

10)  $25x^2 - 16$

**Solve each system by elimination.**

11) 
$$\begin{aligned} -x + y &= 5 \\ 6x - y &= -30 \end{aligned}$$

12) 
$$\begin{aligned} 12x - 7y &= 9 \\ -4x + 4y &= 12 \end{aligned}$$

## Answers to Homework 27.1

1)  $(x + 5)(x - 3)$

2)  $(k + 1)^2$

3)  $(b - 10)(b + 3)$

4)  $(x + 8)(x + 7)$

5)  $(b - 7)(b - 1)$

6)  $(m - 2)(m + 4)$

7)  $(k + 2)(k - 2)$

8)  $(x + 4)(x - 4)$

9)  $(3b + 1)(3b - 1)$

10)  $(5x + 4)(5x - 4)$

11)  $(-5, 0)$

12)  $(6, 9)$