

**Quiz 27.3**

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**Factor each completely.**

1)  $r^2 + 5r - 6$

- A)  $(r + 4)(r - 6)$
- B) Not factorable
- C)  $(r - 1)(r + 6)$
- D)  $(r - 3)(r + 6)$

2)  $v^2 + 6v - 40$

- A)  $(v - 8)(v + 10)$
- B)  $(v + 7)(v + 9)$
- C)  $(v + 2)(v - 2)$
- D)  $(v - 4)(v + 10)$

3)  $k^2 - 6k - 16$

- A)  $(k - 4)(k - 9)$
- B)  $(k - 8)(k + 2)$
- C)  $(k - 8)(k - 2)$
- D) Not factorable

4)  $n^2 + 14n + 40$

- A)  $(n + 10)(n + 4)$
- B) Not factorable
- C)  $(n - 10)(n - 4)$
- D)  $(n + 10)(n - 4)$

5)  $n^2 - 9$

- A)  $(n + 3)(n - 3)$
- B)  $(n + 9)^2$
- C)  $(n + 1)(n - 1)$
- D)  $(n + 5)(n - 5)$

6)  $25n^2 - 16$

- A)  $(5n + 4)(5n - 4)$
- B)  $(n + 4)(n - 4)$
- C)  $(3n + 5)(3n - 5)$
- D)  $(5n - 4)^2$

**Solve each system by elimination.**

7) 
$$\begin{aligned} -10x + 7y &= 9 \\ 8x - 7y &= -3 \end{aligned}$$

- A) (9, 2)
- B) (-9, 3)
- C) (-3, -3)
- D) (9, 3)

8) 
$$\begin{aligned} 8x + 5y &= -12 \\ -16x - 8y &= 16 \end{aligned}$$

- A) Infinite number of solutions
- B) (-5, -10)
- C) (-6, -4)
- D) (1, -4)