1) One factor of the polynomial expression $x^2 + x - 6$ is

(A) $(x - 3)$

(B) $(x - 2)$

(C) $(x - 6)$

(D) $(x - 1)$

2) When the expression $x^2 + 3x - 40$ is factored, the result is

(A) $(x + 8)(x - 5)$

(B) $(x - 8)(x + 5)$

(C) $(x + 8)(x + 5)$

(D) $(x - 8)(x - 5)$

3) If $x - k$ is a factor of $x^2 + x - 30$, then the value of k is

(A) 3

(B) 5

(C) 6

(D) 10

4)

What are the factors of the given polynomial?

(A) $(2x + 1)$ and $(x - 1)$

(B) $(x - 1)$ and $(x - 1)$

(C) $(-x + 1)$ and $(x + 1)$

(D) $(-x + 1)$ and $(x - 1)$

5) The expression $45x^2 + 9x$ can be expressed in factor form as

(A) $9(5x^2 + 1)$

(B) $5(9x^2 + 1)$

(C) $9x(5x + 1)$

(D) $5x(9x + 1)$

6) One factor of $x^2 - 9x + 20$ is

(A) $(x - 10)$

(B) $(x + 5)$

(C) $(x - 4)$

(D) $(x + 2)$

7) The factored form of the polynomial $x^2 - 2x - 15$ can be written as $(x - m)(x + n)$. The value of $m + n$ is .