1) One factor of the polynomial $12x^3 + kx^2 - 10x - 15$ is $2x + 3$.
If k is a whole number, then the value of k is .

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

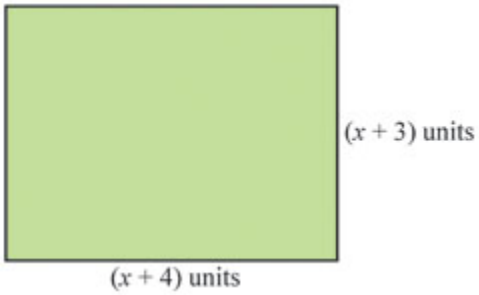
(A) $(x+8)(x-5)$

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

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

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

3)



The area of the rectangle is

(A) $x^2 + 7x + 12$

(B) $x^2 + 7x + 7$

(C) $x^2 + 12$

(D) $x^2 + 7x$

4) If $(3x-4)(4x^2-2x-1) = 12x^3 + Ax^2 + Bx + 4$, then the value of $A + B$ is

(A) -11

(B) -17

(C) -27

(D) -33

5) When the expression $3(y-7)(x-1)$ is simplified, the result is

(A) $-21xy+7$

(B) $xy-y-7x+21$

(C) $3xy-3y-21x+21$

(D) $9xy-9y-63x-63$

6) What is the complete factored form of the trinomial $4mx^2-8mx-12m$?

(A) $4mx(x-1)(2x-3)$

(B) $4mx(x+1)(2x+3)$

(C) $4m(x-1)(x+3)$

(D) $4m(x+1)(x-3)$

7) The binomial $5x^2-180x$ can be expressed in factor form as

(A) $5(x^2-36)$

(B) $5x(x-36)$

(C) $18(x^2-20)$

(D) $18x(x-20)$

8) Which of the following expressions is a factor of the expression $y^2+y^2+21y+y+60$?

(A) $(y+2)$

(B) $(y+6)$

(C) $(y+10)$

(D) $(y+15)$