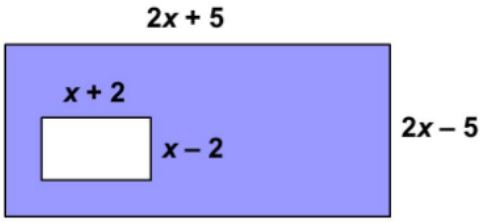
1. Determien the simplifed expression for area of shaded region.



2. 2. Factor: a) $x^2 + 18x + 80$ b) $x^2 - 2x - 24$ c) $x^2 - 49$ d) $4x^2 - 28xy + 49y^2$

   e) $28x^2 + 14y + 21z$ f) $5x^5 + 15x^4 + 8x^3$ g) $-16x^3y - 20y^2 - 4y$

   h) $7x^2 + 15x + 2$ i) $10x^2 - 4x - 6$ j) $16a^2 - 25b^2$

3. Determine the integer that should go into each box so that the polynomial is a perfect square trinomial.
   a) $4x^2 - \boxdot x + 9$ $b)\ x^2 + 10xy + \boxdot\ y^2$ $c)\ \boxdot\ x^2 + 30x + 25$

4. Consider $2x^2 + \blacksquare x + 18$
   Find all the possible values that could replace ■ so that the trinomial is factorable.

1. $3x^2 - 21$

2. A) $(x + 10)(x + 8)$ b) $(x - 6)(x + 4)$ c) $(x + 7)(x - 7)$ d) $(2x - 7y)^2$
   e) $7(4x^2 + 2y + 3z)$ f) $x^2(5x^3 + 15x^2 + 8x)$ g) $-4y(4x^3 + 5y + 1)$
   h) $(7x + 1)(x + 2)$ i) $2(5x + 3)(x - 1)$ j) $(4a - 5b)(4a + 5b)$

3. A) 12 or -12 b) 25 c) 9

4. $37, -37, 20, -20, 15, -15, 13, -13, 12, -12$