

Simplify

$$1) (2x+5)(3x-2) + (x+2)(2x-3)$$

$$2) (3x+2)(2x+3) - (4x-3)(2x-1)$$

$$3) (2x+3y)(3x+4y) - (7x+3y)(x+2y)$$

$$4) (5-x)(3-2x)(4-3x)$$

$$5) (a+b)(a^2-ab+b^2)$$

$$6) (x^2-3x+2)(5x-2) - (3x^2+4x-5)(2x-1)$$

$$7) (5x-3)(x+2) - (2x+5)(4x-3)$$

$$8) \frac{3}{2}x^2(x^2-1) + \frac{1}{4}x^2(x^2+x) - \frac{3}{4}x(x^3-1)$$

$$9) a^2b(a-b^2) + ab^2(4ab-2a^2) - a^3b(1-2b)$$

$$10) (x^2-3x+2)(5x-2) - (3x^2+4x-5)(2x-1)$$

$$11) \frac{2a}{b}(10b-15c) - 6c$$

12) Find product using distributive property

$$a) 99 \times 11 \quad b) 8694 \times 99$$

$$\text{Use } \rightarrow a(b+c) = ab + ac$$

$$a(b-c) = ab - ac$$

13) How much $(3x+2)(4y-3)$ more than $12xy$?