

4④ let algebraic expression to be added = a

$$x^2 + xy + y^2 + a = 2x^2 + 3xy$$

$$\Rightarrow a = 2x^2 + 3xy - x^2 - xy - y^2$$

$$= x^2 + 2xy - y^2$$

⑤ let algebraic expression to be subtracted = x

$$2a + 8b + 10 - x = -3a + 7b + 16$$

$$\Rightarrow x = 2a + 3a + 8b - 7b + 10 - 16$$

$$\Rightarrow x = 5a + b - 6$$

5. let algebraic expression to be subtracted = a

$$3x^2 - 4y^2 + 5xy + 20 - a = -x^2 - y^2 + 6xy + 20$$

$$\Rightarrow a = 3x^2 + x^2 - 4y^2 + y^2 + 5xy - 6xy + \cancel{20} - \cancel{20}$$

$$\Rightarrow a = 4x^2 - 3y^2 - xy$$