

او مرید

۱- با استفاده از اتحادها بسازید

$$1) (x+1)(x+3) = x^2 + 4x + 3$$

$$2) (5x-1)(5x+2) = 25x^2 + 5x - 2$$

$$3) (a+1a)(a-1a) = 2a - 2a(a) - 1a^2 = 2a - 2a^2 - 1a^2$$

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

$$5) (2x^2+4)(2x^3-5) = 4x^5 - 2(2x^3) - 20 = 4x^5 - 4x^3 - 20$$

$$6) (4x+0.1)(4x-0.2) = 16x^2 - 0.1(4x) - 0.02 = 16x^2 - 0.4x - 0.02$$

$$7) (\sqrt{xy} - \frac{1}{x})(\sqrt{xy} + \frac{2}{x}) = xy + \sqrt{xy} - \frac{2}{x}$$

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

$$9) (\frac{2}{x}a + \frac{1}{x}b)(\frac{5}{x}b + \frac{2}{x}a) = \frac{2}{x}a^2 + 2b(\frac{2}{x}a) + \frac{5}{x}b^2 = \frac{2}{x}a^2 + \frac{4}{x}ab + \frac{5}{x}b^2$$

۲- تجزیه کنید

$$1) a^2 + a - 6 = (a-2)(a+3)$$

$$2) b^2 + 5b - 14 = (b-2)(b+7)$$

$$3) x^2 + x - 6 = (x-2)(x+3)$$

$$4) t^2 - 12t + 36 = (t-6)(t-6)$$

$$5) m^2 - 14m + 49 = (m-7)(m-7)$$

$$4) b^2c^2 - 18bc - 16 = (bc-16)(bc+2)$$

$$5) xy - 11\sqrt{xy} + 18 = (\sqrt{xy}-9)(\sqrt{xy}-2)$$

$$6) \frac{1}{y^2} - \frac{12}{y} + 36 = (\frac{1}{y} - 6)(\frac{1}{y} - 6)$$

$$7) 2x^2 - 7x - 4 = \Rightarrow A$$

$$2x^2 - 7x - 4 = A \xrightarrow{x^2} 2x^2 - 7(2x) - 14 = 2A$$

$$(2x-9)(2x+2) = 2A \rightarrow 2(x-4.5)(x+1) = 2A$$

$$(x-4.5)(x+1) = A$$