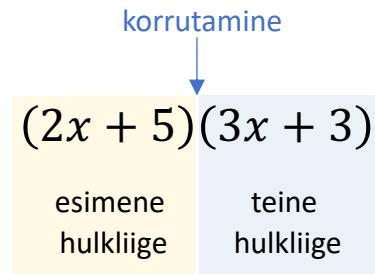


HULKLIIKMETE KORRUTAMINE



1. Korruta esimese hulkliikme iga liige teise hulkliikme kõigi liikmetega.

$$(2x + 5)(3x + 3) =$$

$$= 2x \cdot 3x + 2x \cdot 3 + 5 \cdot 3x + 5 \cdot 3 =$$

$$= \underline{6x^2} + \underline{6x} + \underline{15x} + \underline{15} =$$

$$= 6x^2 + 21x + 15$$

2. Koonda sarnased liikmed.

Veel näiteid:

$$(2x + 1)(x + 3x) = 2x^2 + 6x^2 + x + 3x = 8x^2 + 4x$$

$$(5a - 4)(3a + 5) = 15a^2 + 25a - 12a - 20 = 15a^2 + 13a - 20$$

$$(3x + 4)(2 - 5x) = 6x - 15x^2 + 8 - 20x = -15x^2 - 14x + 8$$

$$(2a - b)(3a - 5b + 2) = 6a^2 - 10ab + 4a - 3ab + 5b^2 - 2b = 6a^2 - 13ab + 5b^2 + 4a - 2b$$

$$(2x + 1)(x - 3x - 5) = 2x^2 - 6x^2 - 10x + x - 3x - 5 = -4x^2 - 12x - 5$$

Korrutamisel
jälgi märke!

HULKLIIKMETE KORRUTAMINE

42. Kirjuta hulkliikmete korrutised.

Näide: $(x + 3)(x + 2) = \underline{x \cdot x} + \underline{x \cdot 2} + \underline{3 \cdot x} + \underline{3 \cdot 2}$

A. $(x + 5)(x + 3) = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$

B. $(a - 5)(a + 10) = \underline{\quad} + \underline{\quad} - \underline{\quad} - \underline{\quad}$

C. $(2 + 3x)(1 - 3x) = \underline{\quad} - \underline{\quad} + \underline{\quad} - \underline{\quad}$

D. $(4m + 7)(5 + 2m) = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$

E. $(5x - y)(x^2 + x + y) = \underline{\quad} + \underline{\quad} + \underline{\quad} - \underline{\quad} - \underline{\quad}$

43. Kirjuta eelmise ülesande korrutiste vastused.

Näide: $(x + 3)(x + 2) = \underline{x^2} + \underline{2x} + \underline{3x} + \underline{6}$

A. $(x + 5)(x + 3) = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$

B. $(a - 5)(a + 10) = \underline{\quad} + \underline{\quad} - \underline{\quad} - \underline{\quad}$

C. $(2 + 3x)(1 - 3x) = \underline{\quad} - \underline{\quad} + \underline{\quad} - \underline{\quad}$

D. $(4m + 7)(5 + 2m) = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$

E. $(5x - y)(x^2 + x + y) = \underline{\quad} + \underline{\quad} + \underline{\quad} - \underline{\quad} - \underline{\quad}$

44. Korruta hulkliikmed.

Koonda sarnased liikmed.

Näide: $(x + 3)(x + 2) = x^2 + 2x + 3x + 6 = x^2 + 5x + 6$

A. $(2 + x)(6 + x) =$

B. $(2a + 4)(3a + 5) =$

C. $(3 + x)(6 - x) =$

D. $(x^2 + 3)(2x + 4) =$

E. $(-3 + x)(5 - 2x) =$

F. $(x - 5)(y + 4) =$

G. $(x + 2)(x^2 - x) =$

45. Korruta hulkliikmed.

Koonda sarnased liikmed.

A. $(x + 3x)(2x + 3x + 2) =$

B. $(3 - 4x)(x + 2x - 3) =$

C. $(1 - 2x^2)(x - 3x + 2) =$

D. $(5x - y)(x + 4x - y) =$

E. $(2x + 3)(x + 1) + (2x + 3)(5x + 2) =$

F. $(x - 3)(x^2 - 2x + 5) + 3x =$

Vastused:

$20x^2 + 8x$

$x^3 - 12x^2 + 6x - 16$

$25x^2 - 10xy + y^2$

$4x^3 - 4x^2 - 2x + 2$

$-12x^2 + 21x - 9$

$12x^2 + 24x + 9$

$x^3 - 5x^2 + 14x - 15$