

## נוסחאות הכפל המקוצר

התרגילים מתוך: דפי חזרה של גבי יקואל לכיתה ט'

### הערה:

השלימו חזקות בהקלדה :  $x^2$

למשל,  $x^2$  הקלידו:  $x^2$  .  $4x^2$  הקלידו  $4x^2$  .

השלימו את הביטויים הבאים, היעזרו ב**נוסחה** **לפירוק** ריבועים:

$$a^2 - b^2 = (a - b)(a + b)$$

$$(x + \underline{\hspace{1cm}})(x - \underline{\hspace{1cm}}) = \underline{\hspace{1cm}} - 49 \quad (\text{א})$$

$$(\underline{\hspace{1cm}} - a)(\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) = 100 - a^2 \quad (\text{ב})$$

$$(3 + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - b) = \underline{\hspace{1cm}} - b^2 \quad (\text{ג})$$

$$(6 - \underline{\hspace{1cm}})(\underline{\hspace{1cm}} + 11) = 36 - 121 \quad (\text{ד})$$

$$(2x + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - 9) = 4x^2 - 81 \quad (\text{ה})$$

$$(8a + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - \underline{\hspace{1cm}}) = \underline{\hspace{1cm}} - 1 \quad (\text{ו})$$

$$(\underline{\hspace{1cm}} + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - \underline{\hspace{1cm}}) = 100 - x^2 \quad (\text{ז})$$

$$(\underline{\hspace{1cm}} + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - \underline{\hspace{1cm}}) = 4x^2 - 25 \quad (\text{ח})$$

השלימו את הביטויים הבאים, היעזרו בנוסחה  $(a \pm b)^2 = a^2 \pm 2ab + b^2$  :

$$(a \pm b)^2 = a^2 \pm 2ab + b^2$$

$$(x + \underline{\hspace{1cm}})^2 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + 25 \quad (\text{א})$$

$$(\underline{\hspace{1cm}} + \underline{\hspace{1cm}})^2 = a^2 + \underline{\hspace{1cm}} + 121 \quad (\text{ב})$$

$$(\underline{\hspace{1cm}} - \underline{\hspace{1cm}})^2 = b^2 - \underline{\hspace{1cm}} + 36 \quad (\text{ג})$$

$$(\underline{\hspace{1cm}} - \underline{\hspace{1cm}})^2 = 4a^2 - \underline{\hspace{1cm}} + 49 \quad (\text{ד})$$

$$(\underline{\hspace{1cm}} - \underline{\hspace{1cm}})^2 = 25x^2 - \underline{\hspace{1cm}} + 81 \quad (\text{ה})$$

$$(9a + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - \underline{\hspace{1cm}}) = \underline{\hspace{1cm}} - 144 \quad (\text{ו})$$

$$(10x + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - \underline{\hspace{1cm}}) = \underline{\hspace{1cm}} - 64 \quad (\text{ז})$$

$$(1 - \underline{\hspace{1cm}})(\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) = \underline{\hspace{1cm}} - 36b^2 \quad (\text{ח})$$

$$(a - \underline{\hspace{1cm}})^2 = \underline{\hspace{1cm}} - 8a + \underline{\hspace{1cm}} \quad (\text{ט})$$

$$(x - \underline{\hspace{1cm}})^2 = \underline{\hspace{1cm}} - 14x + \underline{\hspace{1cm}} \quad (\text{י})$$

$$(3x + \underline{\hspace{1cm}})^2 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + 100 \quad (\text{יא})$$

$$(\underline{\hspace{1cm}} - 6x)^2 = 144 - \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \quad (\text{יב})$$