

9. 102×98 ከ $\hat{e}^3$ ስኞት ጋር፣ $\hat{e}^3 \pm i\hat{e}^3$ ከ $i\hat{e}^3$ ጋር ያለውን ስኞት ይጻፉ።

$$\textcircled{1} \quad (a+b)^2 = a^2 + 2ab + b^2$$

$$\textcircled{2} \quad (a - b)^2 = a^2 - 2ab + b^2$$

$$\textcircled{3} \quad (a+b)(a-b) = a^2 - b^2$$

④ $(x + a)(x + b) = x^2 + (a + b)x + ab$

$$\textcircled{5} \quad (ax + b)(cx + d) = acx^2 + (ad + bc)x + bd$$

[illegible]

$$3x - 2y - \{x - (7y - 6x) + 5\} = ax + by + c$$

$$\begin{aligned} \dot{\imath} \dot{\imath} \alpha &: 14, \dot{\imath} \pm \dot{\imath} \S : 10, \dot{\imath} \dot{\imath} \S : -10, \ddot{\epsilon}^a \dot{\imath} : -14, \\ \dot{\imath} \ddot{\epsilon} &: 12 \end{aligned}$$

$$\mathbf{11.} \quad a, b \in \mathbb{R} \rightarrow 3x - 5y - \{y - 2(2x + 3y)\} = ax + by \quad \frac{1}{4} \in \mathbb{R}, a + b \in \mathbb{R} \rightarrow \frac{1}{4}.$$

12. $\ddot{e} \propto \dot{\theta}$ $\dot{\theta} = \hat{e}^\circ \ddot{\theta}$ $\dot{\theta} = -\ddot{\theta}/4$.

$2a - [a - \{3b - (5a - b)\} + b]$

13. $\text{ë} \text{¤} \text{ì} \quad \text{ê}^3 \text{ì}^\circ \text{ì} \text{¤} \quad \text{ì}^3 \text{ì} \quad \text{ê}^2 \text{ì} \quad \text{ë}^{\text{a}} \text{ë} \quad \text{ê}^3 \quad \text{ë} \text{¥}' \text{ë} \text{©}'?$

① $-(a - 5b) = a + 5b$

$$\textcircled{2} \quad -x(-3x + y) = 3x^2 - xy$$

$$\textcircled{3} \quad 2x(3x - 6) = 6x^2 - 6x$$

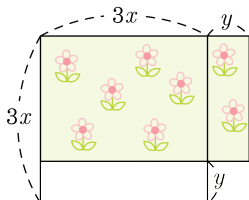
$$\textcircled{4} \quad 3x(2x - 3y) - 2y(x + y) = 6x^2 - 11xy - 2y^2$$

$$\textcircled{5} \quad -x(x - y + 2) + 3y(2x + y + 4) = -x^2 + 7xy - 2x + 3y^2 + 12y$$

14. $5x - 2y = -4x + y - 3$ i $\frac{1}{4}$ e , $5x - 2y + 5$ e $\forall x$ i
e' i i $\frac{1}{4}$ e; e i e' i $\frac{1}{4}$.

15. $(2x + ay)^2 = bx^2 + cxy + 9y^2$ if $a - b + c = 0$ and $a > 0$

16. $(x^2 + 3x + 2)(x^2 + 5x + 6) = (x^2 + ax + b)(x^2 + cx + d)$, then $a + b + c + d =$?



17. $(x^2 + 2x + 5)(x^2 + 3x + 2) = (x^2 + ax + b)(x^2 + cx + d)$, then $a + b + c + d =$?

18. $(-a + \frac{1}{2}b)^2 =$?

19. $(x - 4)(x - 2)(x + 1)(x + 3) - 25 = Ax^4 + Bx^3 + Cx^2 + Dx + E$, then $A + B + C + D + E =$?

20. $(2x + y)(3x + 2y) =$?

21. $\frac{1}{3}(2x - y)(3x + 2y) - \frac{3}{2}(x - 2y)(4x + 3y) =$?

22. $(x_1, y_1), (x_2, y_2)$ are two points, then $(x_2, y_2) = x_1x_2 + x_1y_2 + y_1x_2 + y_1y_2$ is true or false? If true, then $(2x, y) \times (-y, 3x) =$?

① $9x^2 + 6xy + y^2 (m^2)$

② $9x^2 - 6xy + y^2 (m^2)$

③ $6x^2 - y^2 (m^2)$

④ $9x^2 - y^2 (m^2)$

⑤ $9x^2 + y^2 (m^2)$

① $2x^2 + 5x + 7$

② $4x^2 + x - 3$

③ $4x^2 - x + 3$

④ $5x^2 + x + 2$

⑤ $5x^2 - x - 8$

① $-\left(a - \frac{1}{2}b\right)^2$

② $-\left(a + \frac{1}{2}b\right)^2$

③ $\left(-a - \frac{1}{2}b\right)^2$

④ $\left(a - \frac{1}{2}b\right)^2$

⑤ $\left(a + \frac{1}{2}b\right)^2$

- ① -2 ② -1 ③ 0 ④ 1 ⑤ 2

- ① 2 ② 5 ③ 7 ④ 9 ⑤ 11

- ① $\frac{22}{3}$ ② $\frac{15}{2}$ ③ $\frac{23}{3}$ ④ $\frac{47}{6}$ ⑤ 8

① $-6x^2 + 2xy - y^2$ ② $-6x^2 + xy + 3y^2$

③ $2x^2 - xy - y^2$ ④ $6x^2 + xy - y^2$

⑤ $6x^2 - xy + 3y^2$

23. A, B ăĩ $A * B = A - 2B$ ăĩ $A = x^2 - 4x + 2, B = x^2 + 3x - 5$ ăĩ $(A * B) * B$ ăĩ

- ① $-3x^2 - 16x - 22$ ② $-3x^2 - 16x + 22$
 ③ $2x^2 - 14x + 21$ ④ $2x^2 - 15x + 22$
 ⑤ $3x^2 + 14x + 22$

24. a, b ăĩ $a \# b = a + b - ab, a * b = a(a + b)$ ăĩ $a = -x, b = x - 4y$ ăĩ $(a \# b) + (a * b)$ ăĩ x, y ăĩ

- ① $x^2 - y$ ② $x^2 - 4$ ③ $2x^2 - y$
 ④ $2x^2 - 2y$ ⑤ $x^2 - 4y$

25. ăĩ $(4 + 2)(4^2 + 2^2)(4^4 + 2^4)(4^8 + 2^8)(4^{16} + 2^{16})(4^{32} + 2^{32}) + 2^{63} = 2^{()}$

- ① 126 ② 127 ③ 128
 ④ 129 ⑤ 130