

stress test

1. $a = -1$, $b = 5$ ì ¼ ë , $\left(\frac{b^3}{2a}\right)^3 \div (a^2b)^4 \times \left(-\frac{4a}{b^2}\right)^2$
 ì ê° ì êµ¬í ì ¬ë ¼.

2. ë ð ì ì ð x ì ë í ì '° ì ì , ê² ì ?

① $1 - 3x + 2x^2 + 4x^3$

② $-x^3 + 5x + 1$

③ $x - 8y + 1$

④ $4x^2 + 3x - 1$

⑤ $5xy - 3$

3. ì ì a, b ì ë í ì ¬ $3x - \{2x - (x - y)\} = ax + by$
 ì ¼ ë , a, b ì ê° ì ê° ê° êµ¬í ì ¬ë ¼.

① $a = -1, b = 1$ ② $a = -1, b = 2$

③ $a = 0, b = 1$ ④ $a = 1, b = -1$

⑤ $a = 2, b = -1$

4. $2a + b$ ì 3 ë° ì ì ì 'ë ð ì A ì 2 ë°°ë¥¼ ë¹¼ë©'
 $2a + 13b$ ê° ë ë ð ê³ í ë ð . ì 'ë ð ì A ë¥¼
êµ¬í ì ¬ë ¼.
5. ë ð ì ì ì ì ê° ë ë°, ì§ ë ·ê³¼ ë ðë¥, í ë ë ?

① $a^{\square} \times a^4 = a^7$

② $a^3 \div a^6 = \frac{1}{a^{\square}}$

③ $\left\{\frac{a^2}{b}\right\}^3 = \frac{a^6}{b^{\square}}$

④ $a^3 \times (-a)^4 \div a^{\square} = a^4$

⑤ $(a^{\square})^4 \div a^6 = a^2$

6. $3x(x - 5) + 4x(1 - 3x) = ax^2 + bx + c$ ì ¼ ë , abc ì
ê° ì ?

① 0 ② -11 ③ -20

④ 99 ⑤ -99

7. $x = 2, y = -1$ ì ¼ ë , ë ð ì ì ì ê° ì êµ¬í ì ¬ë ¼.

$2x - [7y - 2x - \{2x - (x - 3y)\}]$

8. $3x(x - 5) + 4x(1 - 3x) = ax^2 + bx + c$ ì ¼ ë , abc ì
ê° ì ?

① 0 ② -11 ③ -20 ④ 99 ⑤ -99

9. $\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$?

- ① $(3x+1)^2$ ② $(3x-1)^2$
 ③ $(3x-1)(x-3)$ ④ $(3x+1)(x+3)$
 ⑤ $(3x+1)(3x-1)$

10. $128^{2a-1} \div 16^{a+2} = 8^{3a-4}$? $a =$?

11. $\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$?

- ① $-(a-5b) = a+5b$
 ② $-x(-3x+y) = 3x^2 - xy$
 ③ $2x(3x-6) = 6x^2 - 6x$
 ④ $3x(2x-3y) - 2y(x+y) = 6x^2 - 11xy - 2y^2$
 ⑤ $-x(x-y+2) + 3y(2x+y+4) = -x^2 + 7xy - 2x + 3y^2 + 12y$

12. $\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$.
 $2a - [a - \{3b - (5a - b)\} + b]$

13. $\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$?

$\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$?
 $a =$?

14. $\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$?

15. $\frac{1}{x^2} \div \frac{1}{x^3} = \frac{1}{x^5}$?

- ① $(x^2-9)m^2$ ② $(x^2-x-6)m^2$
 ③ $(x^2+x-6)m^2$ ④ $(x^2-4x+4)m^2$
 ⑤ $(x^2+6x+9)m^2$

16. $5x-2y = -4x+y-3$?

17. $\ddot{e} \varpi \dot{\imath} \ddot{e}^3 \hat{e}_s^\circ \dot{\imath} \varpi \dot{\imath}^3 \hat{e}^2 \dot{\imath} \ddot{e}^a \ddot{e} \hat{e}^3 \ddot{e} \mathbb{Y}_s \hat{e}^2 \dot{\imath} ?$

$\ddot{e}^3 \hat{e}_s^\circ$	
① $8^4 = 2^{12}$	④ $(-25)^4 = -5^8$
② $27^8 = 3^{11}$	⑤ $64^5 = 2^{30}$

- ① ①, ④ ② ①, ⑤ ③ ④, ⑤
④ ④, ⑤ ⑤ ④, ⑤, ⑤

18. $\ddot{e} \varpi \dot{\imath} \dot{\imath} \dot{\imath} \dot{\imath} \hat{e}^\circ \dot{\imath} \neg \hat{e}^\circ \ddot{e} \mathbb{Y}_s \hat{e}^2 \dot{\imath} \hat{e}^3 \ddot{e} \mathbb{Y}' \ddot{e} \odot' ?$

- ① $2a(3x+2) = 6ax+2a$
② $(2ab+3b) \div \frac{b}{2} = 4a+6b^2$
③ $(8x^2-12x) \div (-4x) = -2x+3$
④ $2x(3x-1) - 3x(4-x) = 9x^2-10x$
⑤ $3x(-x+2y-4) = 3x^2+6xy-12x$

19. $\dot{\imath} \dot{\imath} \ddot{e} \varpi \dot{\imath} \dot{\imath} 3x^2+5x-4 \ddot{e} \mathbb{Y}^{1/4} \ddot{e}^{1/4} \dot{\imath} \ddot{e} \ddot{e} 7x^2+3x+1$
 $\dot{\imath} \dot{\imath} \ddot{e} \dot{\imath} \ddot{e} \varpi. \dot{\imath} \dot{\imath} \ddot{e} \varpi \dot{\imath} \dot{\imath} \hat{e} \mu \neg \dot{\imath} \ddot{e} \odot' ?$

- ① $-4x^2+2x-3$ ② $-4x^2-8x-5$
③ $4x^2+8x-3$ ④ $10x^2+8x-5$
⑤ $10x^2+8x-3$

20. $a = -2, b = -\frac{2}{5} \dot{\imath}^{1/4} \ddot{e}, \ddot{e} \varpi \dot{\imath} \dot{\imath} \hat{e}^\circ \dot{\imath}$
 $\hat{e} \mu \neg \dot{\imath} \neg \ddot{e}^{1/4}.$
 $4a(a-2b) - a(2a-3b)$

21. $x = \frac{1}{4}, y = -\frac{2}{7} \dot{\imath}^{1/4} \ddot{e}, \frac{6x^2y-15xy^2}{3x^2y^2} \dot{\imath} \hat{e}^\circ \dot{\imath} ?$

- ① -27 ② -13 ③ 13
④ 18 ⑤ 27

22. $\ddot{e} \dot{\imath} x, y \dot{\imath} \ddot{e} \dot{\imath} \dot{\imath} \neg \dot{\imath}^\circ \dot{\imath}^\circ \star, \blacktriangle \ddot{e} \mathbb{Y}^{1/4} x \star y =$
 $x^2y, x \blacktriangle y = xy^2 \dot{\imath}^{1/4} \ddot{e} \dot{\imath} \dot{\imath} \dot{\imath} \ddot{e} \varpi. \dot{\imath} \dot{\imath} \ddot{e}, \ddot{e} \varpi \dot{\imath}$
 $\ddot{e} \S \dot{\imath} \dot{\imath} \pm \dot{\imath} \ddot{e} X, Y \dot{\imath} \ddot{e} \dot{\imath} \dot{\imath} \neg 3a(X \div Y) \dot{\imath} \hat{e}^\circ \dot{\imath}$
 $\hat{e} \mu \neg \dot{\imath} \dot{\imath} \neg \ddot{e}^{1/4}.$
 $3a \star X = 12a^2b, Y \blacktriangle 5b = 100ab^2$

23. $4\hat{e}^\circ \dot{\imath} \dot{\imath} a, b, c, d \dot{\imath} \ddot{e} \dot{\imath} \dot{\imath} \neg \hat{e}_s^\circ \dot{\imath}_s, | \ddot{e} \mathbb{Y}^{1/4} \begin{vmatrix} a & b \\ c & d \end{vmatrix} =$
 $ad - bc \ddot{e} \dot{\imath} \dot{\imath} \dot{\imath} \ddot{e} \varpi.$
 $\dot{\imath} \dot{\imath} \ddot{e}, \begin{vmatrix} x+2y-3 & -\frac{3}{2} \\ y-x+1 & \frac{1}{2} \end{vmatrix} \dot{\imath} ?$

- ① $x - \frac{5}{2}y - 3$ ② $x - \frac{3}{2}y - 2$
③ $x + \frac{3}{2}y - 1$ ④ $-x + \frac{5}{2}y$
⑤ $-x + \frac{7}{2}y$

24. $abc = 1 \dot{\imath}^{1/4} \ddot{e}, \frac{a}{ab+a+1} + \frac{b}{bc+b+1} + \frac{c}{ca+c+1}$
 $\dot{\imath} \hat{e}^\circ \dot{\imath} \hat{e} \mu \neg \dot{\imath} \neg \ddot{e}^{1/4}.$

25. $2(3+1)(3^2+1)(3^4+1)(3^8+1) = 3^a + b$ ¼ ¨ , ì ì
 a , b ì í © $a + b$ ê° ì ?

① 15

② 16

③ -15

④ -16

⑤ 9