12-16-13

① $(n^3)^3 = n^3 \cdot n^3 \cdot n^3$
$nnn \; nnn \; nnn$
n^9

⑮④ $\left(a^{-3}b^{-2}\right)^{-2}$

$\left(\dfrac{1}{a^3 b^2}\right)^{-1 \cdot 2}$

$\left(\dfrac{a^3 b^2}{1}\right)^{2} = a^3 b^2 \cdot a^3 b^2$
$a^6 b^4$

�["]⑤① $f(x) = x^2 - 9$
$\mathbb{R}$

$f(x) = \dfrac{x^4 - 10}{x+3} \quad \mathbb{R} \; x \neq -3$

㉑ $(2n^3 y^4)^2 + n(n^5)y^8$
$4n^6 y^8 + 1 n^6 y^8$
$5 n^6 y^8$

⑬⑧ $\dfrac{36}{L \; \text{or} \; 0} \cdot \dfrac{36}{L/0} \cdot \dfrac{36}{L/0} = 46656$

⑬⑥ $\dfrac{76!}{74! \, 3!}$

$\dfrac{76 \cdot 75 \cdot \cancel{74 \cdots 2 \cdot 1}}{3 \cdot 2 \cdot 1 \; \cancel{74 \cdots 2 \cdot 1}} = \dfrac{5700}{6}$
950

Simplify
$2(2n-4) - (6n-2)$
$4n - 8 - 6n + 2$
$-2n - 6$

$\begin{array}{r} n + 5 + \frac{9}{n-2} \\ n-2 \overline{) \; n^2 + 3n - 1} \end{array}$
$\quad - \; n^2 - 2n$
$\quad\quad\quad 5n - 1$
$\quad\quad\; - \; 5n - 10$
$\quad\quad\quad\quad 9$

1

$$(n+5)^2$$

$$(n+5)(n+5)$$

$$n^2 + 10n + 25$$

Interval notation

① $n \geq 3$ $[3, \infty)$

② $n < 3$ $(-\infty, 3)$

③ $-2 < n \leq 5$

$$(-2, 5]$$

$$\begin{bmatrix} 2 & 3 \\ 4 & 1 \end{bmatrix} \cdot \begin{bmatrix} 1 & 4 \\ 0 & 7 \end{bmatrix}$$

$$\begin{bmatrix} 2+0 & 8+21 \\ 4+0 & 16+7 \end{bmatrix}$$

$$\begin{bmatrix} 2 & 29 \\ 4 & 23 \end{bmatrix}$$

$$\begin{bmatrix} 2 & 1 & 6 \\ 3 & 4 & 10 \end{bmatrix} \quad 2 \times 3$$

$$R \times C$$

$$\begin{bmatrix} 1 & 3 \\ -2 & 1 \end{bmatrix} \cdot \begin{bmatrix} 0 & 1 \\ 4 & 5 \end{bmatrix}$$

$$\begin{bmatrix} 0+12 & 1+15 \\ 0+4 & -2+5 \end{bmatrix} = \begin{bmatrix} 12 & 16 \\ 4 & 3 \end{bmatrix}$$
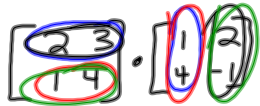
Put the following in
interval notation

① $n > 3$ $(3, \infty)$

② $n \le 3$ $(-\infty, 3]$

③ $-2 < n \le 7$ $(-2, 7]$

$$\begin{bmatrix} 2 & 3 \\ 1 & 4 \end{bmatrix} \cdot \begin{bmatrix} 1 & 2 \\ 4 & 1 \end{bmatrix}$$

$$\begin{bmatrix} 2+12 & 4-3 \\ 1+16 & 2-4 \end{bmatrix} = \begin{bmatrix} 14 & 1 \\ 17 & -2 \end{bmatrix}$$

$$3\begin{bmatrix} -1 & 2 \\ 5 & 0 \end{bmatrix} = \begin{bmatrix} -3 & 6 \\ 15 & 0 \end{bmatrix}$$

$5n - (2n-4) - (n+1)$
$5n - 2n + 4 - n - 1$
$2n + 3$

Domain $f(x) = x^2 - 4$
$\mathbb{R}$

Domain $f(x) = \dfrac{x^{100}}{x-2}$
$\mathbb{R}$ except $x \ne 2$

A: 2×2   C: 2×3
B: 4×2   D: 3×2

A·C   C·D
B·C   D·A
B·A   D·C

In how many ways
can I make my outfit
for the day if I have
20 shirts, 12 pairs of pan
and 15 pairs of shoes?

$\underset{s}{20} \cdot \underset{p}{12} \cdot \underset{shoes}{15} = 360$

4

Give midpoint

$$(2, n+3) \quad (7, n+5)$$

$$\left(\frac{2+7}{2}, \frac{n+3+n+5}{2}\right)$$

$$\left(\frac{9}{2}, \frac{2n+8}{2}\right)$$

$$\left(4\tfrac{1}{2}, n+4\right)$$

Give equation in SIF that
goes through $(1,4)$ and $(2,7)$

$$y - y_1 = m(x - r_1) \qquad m = \frac{\Delta y}{\Delta x}$$

$$y - 4 = 3(x - 1) \qquad = \frac{7-4}{2-1}$$

$$\begin{array}{l} y - 4 = 3x - 3 \\ +4 +4 \\ \hline y = 3x + 1 \end{array} \qquad = 3$$

What is $\quad y = \tfrac{1}{2}x - 4$
in standard form?

$$2\left[y = \tfrac{1}{2}x - 4\right]$$

$$\begin{array}{l} 2y = x - 8 \\ -x -x \\ \hline \end{array}$$

$$-1\left[-x + 2y = -8\right]$$

$$x - 2y = 8$$

$$\overset{0}{\underset{n=-2}{\sum}} n^2$$

$$n = -2 \quad (-2)^2 = 4$$

$$n = -1 \quad (-1)^2 = 1$$

$$n = 0 \quad 0^2 = \frac{0}{.5}$$