## A/L Combined Maths - Basics - 30th September 2023

```
((+9g*+6g)+(3+9g)-6g*-36
         3y^2 + 15y - 72 = 0
y^2 + 5y - 24 = 0
y=1 3 = 3 = 5 y = \frac{3}{2}, y = \frac{5+11}{2}, y = \frac{5-11}{2}
    4 = 5 | Se = -23/2 | y = 3 | (y = -8)
    8) X (3y-5)= 4 -1
y (2x+7)= 27-2
    0 ⇒ × *<u>4</u>
(3y-5) -3
    0 2 @ V 1991 N VV
     y(2 x + 7) = 27
          y (8+214-35) = 814-155
          8y + 21y^{2} - 35y - 81y + 135 = 0
-\frac{27}{-81}
         21y^{2} - 108y + 135 = 0
7y^{2} - 36y + 45 = 0
        \begin{array}{c} C = 93 \\ y = -6 \pm \sqrt{9^{2} - 9 + 26} \\ \\ y = -36 \pm \sqrt{34^{2} - 84.7 \times 10} \\ \\ y = -36 \pm \sqrt{32^{2} - 124.0} \\ \\ 17 \\ \end{array}
\begin{array}{c} (30)^{2} = (30 + 6)^{2} \\ \\ 3\sqrt{6} + 36 + 36 \\ \\ 3\sqrt{6} + 3\sqrt{6} + 36 \\ \\ 3\sqrt{6} + 36 + 36 \\ \\ 3\sqrt{6} 
        y = 36 \pm 6
y = 42
y = 42
y = 3
y = 3
     n= 4
(3j=5)
    \label{eq:constraints} \mathcal{Y}_{\mathcal{S}}\mathcal{C}_{\mathcal{O}_{1}}, \ \ \mathcal{J}_{\mathcal{F}}^{\mathcal{F}_{N}}\mathcal{J}_{\mathcal{F}_{N}} = \left\{ \begin{array}{ll} x = \frac{14}{5} \\ y = \frac{15}{5} \end{array} \right\}, \quad \left\{ \begin{array}{ll} \mathcal{E} = 1 \\ y = 3 \end{array} \right\} \quad / ,
 9) 3\chi_{1}^{3} + 5\chi_{2}^{3} = 23\chi_{1}^{3} - (2)
      0 \Rightarrow 3K + 5y = 24 \tilde{y} \tilde{y}
3K + 24 \tilde{y} = -54 \tilde{y}
3(3 - 24 \tilde{y}) = -54 \tilde{y}
x = -54 \tilde{y}
(3 - 24 \tilde{y}) = -34 \tilde{y}
    ③ × 4 - ⑤×5⇒
                \frac{12}{y} + \frac{24}{x} - \left(\frac{35}{y} + \frac{26}{x}\right) = 116 - 185
                                A. [] a 3 , Walmry >
                                                  \frac{3}{1/3} + \frac{5}{2} = 29
9 + \frac{5}{2} = 29
                                                       \frac{5}{x} = \frac{20}{10}
x = \frac{5}{20} = \frac{5}{10}
      \mathfrak{I}_{n} = \mathcal{L}_{n}, \text{ given} = \left\{ \begin{array}{l} \chi = 0 \\ \tilde{y} = 0 \end{array} \right\}, \left\{ \begin{array}{l} \chi = 1/4 \\ \tilde{y} = 1/3 \end{array} \right\}_{1}
  13) ab = 3 - 0 \checkmark 0/6 \Rightarrow
bc = 6 - 2 \checkmark \frac{a}{c} = \frac{1}{2} - 4
ac = 2 - 3
                    0\times 0 \Rightarrow a^2 = 1 \Rightarrow a = +1, -1
    tx - 5y + 3z = 2 -2
2y + z = 8 -3
      1+2+3 => 6x = 20 > x = 10/3 /
        N= 10 3 60 U28 W LA > 20 + 3 y - 4 z = 10
                                                34-42=103-1
      y = \frac{106}{3}
y = \frac{106}{33}
        4030 NJ&MU) ⇒
                                        2 \times \frac{106}{33} + 2 = 8
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