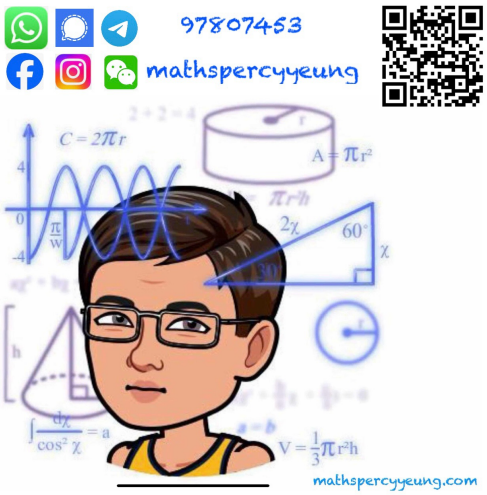
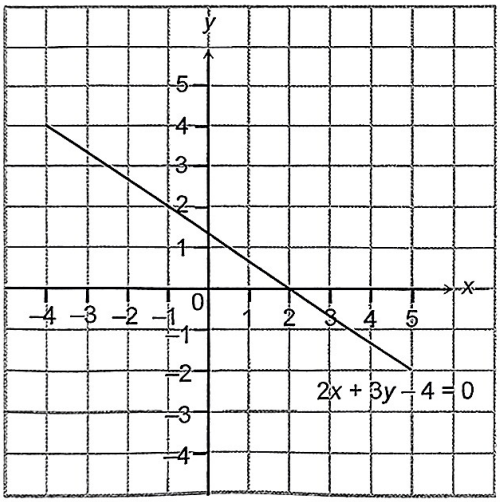
9 Linear Equations in Two Unknowns



Section Q: Write your answers in the spaces provided. Working need not be shown.

1.



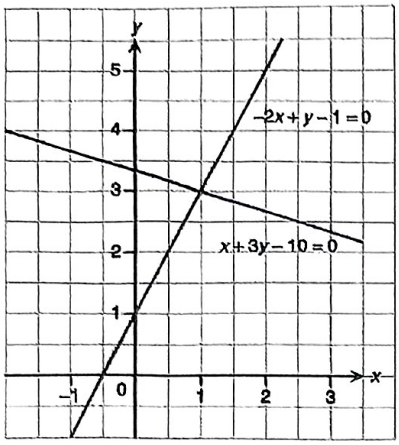
The above figure shows the graph of $2x + 3y - 4 = 0$. Which of the following points lie(s) on the graph? (May be more than one answer)

$P(0, 2)$, $Q(2, 0)$, $R(-2, 3)$, $S(5, -2)$

Answer: _____

NA09-4

2.



The figure shows the graphs of $x+3y-10=0$ and $-2x+y-1=0$.

Solve $\begin{cases} x+3y-10=0 \\ -2x+y-1=0 \end{cases}$ graphically.

Answer: $x =$ _____, $y =$ _____

NA09-6

3. In a museum, the total ticket fee for 2 adults and a child is \$144. The ticket fee for 2 adults is equal to the ticket fee for 5 children. Let \$$x$ and \$$y$ be the ticket fees for an adult and a child to visit the museum respectively. Set up a pair of simultaneous equations to show the relation between x and y.

Simultaneous equations: $\begin{cases} \text{\_\_\_\_\_} \\ \text{\_\_\_\_\_} \end{cases}$

Section B: Answer in the spaces provided. All working and conclusions must be clearly shown.

NA09-1

4. Complete the following table for the equation $3x-y-2=0$.

x	−1	0	1
y			1

NA09-1

5. Complete the following table for the equation $y=\frac{x}{5}+1$.

x	−5	0	5

y		1	

NA09-5

6. Solve the simultaneous equations $\begin{cases} x+y=2 \\ y=2x-1 \end{cases}$.

NA09-5

7. Solve the simultaneous equations $\begin{cases} y=15x+3 \\ y=12x+9 \end{cases}$.

NA09-5

8. Solve the simultaneous equations $\begin{cases} 4x+3y=11 \\ 2x-3y=7 \end{cases}$

NA09-5

9. Solve the simultaneous equations $\begin{cases} 5x+3y=27 \\ 5x+7y=23 \end{cases}$