

Year 09 Weekly Tutorial - 01

mathsalphacom

1. Expand and simplify.

a) $(3x + 2)(x - 5)$

b) $(2x - 1)(3x + 2)(x + 2)$

2. Solve.

a) $5 + 2(x - 1) = x + 3$

b) $\frac{2x+3}{3} = \frac{x-5}{2}$

3. Find gradient and y-intercept of the straight line, $5x + 2y + 3 = 0$.

4. Factorize.

a) $x^2 - x - 12$

b) $x^2 - 81$

c) $6x^2 + 11x - 10$

5. Simplify.

a) $(2x)^2 \times 3x^3$

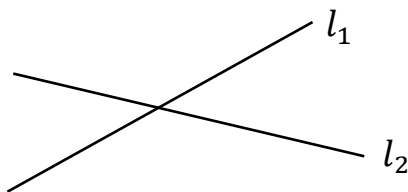
b) $\left(\frac{125}{64}\right)^{-\frac{2}{3}}$

6. Make x the subject; $y = \frac{15x-7}{5x-3}$

7. Solve, $2x - 1 > 3(x + 2)$, and show the solutions on the number line.

8. Solve by factorization, $2x^2 - x - 6 = 0$

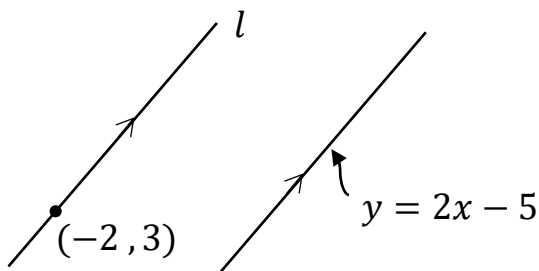
9. Find the coordinates at the intersection points of line l_1 and l_2 .



$$l_1 \equiv y - 2x + 3 = 0$$

$$l_2 \equiv 2y + 3x - 1 = 0$$

10.



Find the equation of line l .