9 May 2023
13.2 Equation in the form $y=mx+c$

*Worksheet

Midpoint of a line

$$\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right) \qquad (x_1, y_1) \quad (x_2, y_2)$$

Eg1. $\left(\frac{10+-4}{2}, \frac{4+-6}{2}\right)$ P $(10, 4)$ Q $(-4, -6)$

$= (3, -1)$ is the midpoint of PQ

Eg.2 $\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$ $(5, -2)$ $(2, -6)$

$$\left(\frac{5+2}{2}, \frac{-2+-6}{2}\right)$$

$= (3.5, -4)$

Pg 135 Ex 13.3 Q 2, 3, 4

36) $(8, 0)$ $(10, 12)$

$$\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$$

$$\left(\frac{8+10}{2}, \frac{0+12}{2}\right) = (9, 6)$$

10 May 2023
Graphs in real-life contexts

Pg 136 Ex 13.4

11 May 2023
End of Unit Review
Graphs pg 139

12 May 2023

$f(x) = 2x$
$g(x) = x-3$

$fg(x)$

$2(x-3)$
$2x-6$

$h(x) = x^2$ $\quad k(x) = x+4$

$kh(x) = x^2 + 4$ $\quad hk(x) = (x+4)^2$

$kh(3)$

$h(3) = 3^2$
$= 9$

$k(9) = x+4$
$9+4$