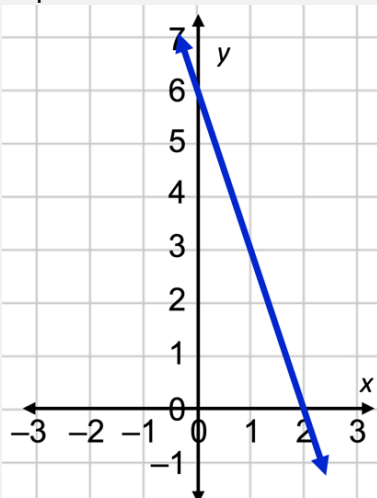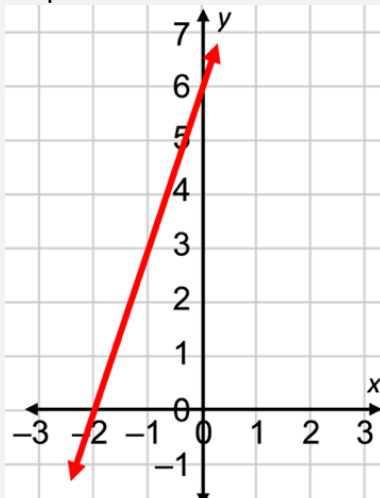*Moving Straight Ahead*   **Learning Aid 4.2: Constant of Proportionality**

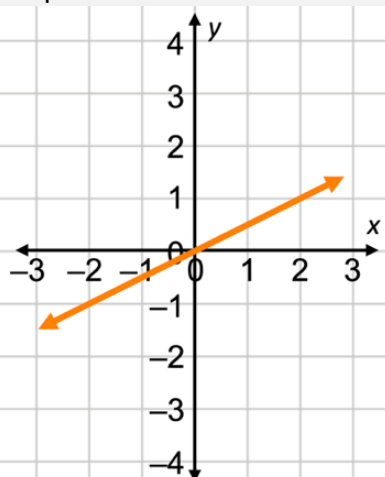Graph 1

Graph 2

Equation 1

$$y = x + 5$$

Equation 2

$$y = 20 - 3x$$

Graph 3

Graph 4
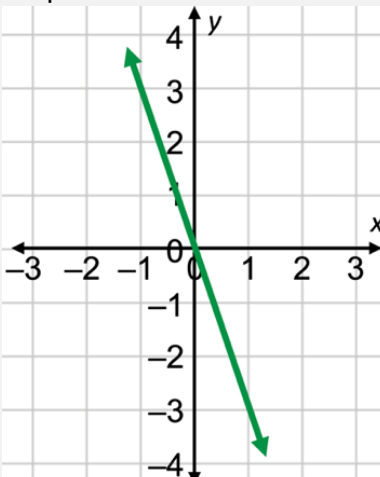
Equation 3

$$y = -x$$

Equation 4

$$y = 0.5x$$

Table 1

x	−6	−4	−2	0	2	4
y	−10	−7	−4	−1	2	5

Table 2

x	1	2	3	4	5	6
y	4.5	4.0	3.5	3.0	2.5	2.0

Table 3

x	−2	−1	0	1	2
y	−1	−1	−1	−1	−1

Table 4

x	2	3	4	5	6	7
y	−5	−7.5	−10	−12.5	−15	−17.5

Context 1
A fire in California is burning at a rate of 5 square miles per hour. How many square miles n have burned after t hours?

Context 2
Mia borrows $500 from her uncle to buy a bike. Mia pays back $25 a week. How much money is left to pay off A after w weeks?

Context 3
You can estimate Fahrenheit F from Celsius C temperature. Multiply the Celsius temperature by 2 and add 30. What equation will estimate the temperature from one temperature system to the other?

Context 4
Will pays $79 a month for unlimited data. What equation would show Will's cost A, as the amount of data x increases in a month?