

5) $4.5 \frac{\text{gal}}{\text{min}} \times \frac{4.546 \text{ L}}{\text{gal}} \times \frac{1}{60 \frac{\text{sec}}{\text{min}}}$

↓ IMPERIAL GALLONS

$$0.34 \frac{\text{GAL} \times \text{L} \times \text{min}}{\text{min} \times \text{GAL} \times \text{SEC}}$$

$$0.34 \frac{\text{L}}{\text{SEC}}$$

$$\text{or } 0.28 \frac{\text{L}}{\text{SEC}}$$

USING IMP GAL / USING US GAL

6) $2y + 3x = 12 \Rightarrow 2y = 12 - 3x$
 $\Rightarrow y = \frac{12}{2} - \frac{3x}{2} \Rightarrow y = -1.5x + 6$

$y=0 \quad 2 \times 0 + 3x = 12$

$$3x = 12$$

$$x = \frac{12}{3} = 4$$

$x=0 \quad 2y + 3 \times 0 = 12$

$$2y = 12$$

$$y = \frac{12}{2} = 6$$

for $x=0 \quad y=6$
 $b = -1.5(0) + b$

ex: $y = mx + b$ $m = \frac{y_1 - y_2}{x_1 - x_2} = \frac{6-0}{0-4} = -1.5$ $b = 6$
 $y = -1.5x + 6$

1) $-x(x-6)^2$
 $-x(x-6)(x-6)$
 $-x(x^2 - 6x - 6x + 36)$
 $-x^3 + 12x^2 - 36x$

2) $\frac{15x^8 + 45x^6 + 25x^4}{5x^6}$

$$\frac{15x^8}{5x^6} + \frac{45x^6}{5x^6} + \frac{25x^4}{5x^6}$$

$$3x^2 + 9x^0 + 5x^{-2}$$

$$3x^2 + 9 + \frac{5}{x^2}$$

3) $[-(2z^3 + 5z^2 - 2z) + (4z^3 + z^2 + 6z)] + 7z^2$
 $(-2z^3 - 5z^2 + 2z) + (4z^3 + z^2 + 6z) + 7z^2$
 $2z^3 - 4z^2 + 8z + 7z^2$
 $2z^3 + 3z^2 + 8z$

4) $45.8 \frac{\text{km}}{\text{h}} \times \frac{1000 \text{ m}}{\text{km}} \times \frac{1}{60 \frac{\text{min}}{\text{h}}} \times \frac{1}{60 \frac{\text{sec}}{\text{min}}}$

$$12.72 \frac{\text{km} \cdot \text{m} \cdot \text{h} \cdot \text{min}}{\text{h} \cdot \text{km} \cdot \text{min} \cdot \text{sec}} = 12.72 \frac{\text{m}}{\text{s}}$$