

3.2.4

HWK

3-102)

a)

$$\begin{array}{ccc} & 1 & \\ 0.5 & \times & 2 \\ & 2.5 & \end{array}$$

b)

$$\begin{array}{ccc} & 10 & \\ 2 & \times & 5 \\ & 7 & \end{array}$$

c)

$$\begin{array}{ccc} & 5 & \\ -2.5 & \times & -2 \\ & -4.5 & \end{array}$$

d)

$$\begin{array}{ccc} & -48 & \\ 8 & \times & -6 \\ & 2 & \end{array}$$

3-103)

Joe $\frac{8 \text{ songs}}{10 \text{ min.}} = \frac{0.8}{1 \text{ min}}$

Jasmine $\frac{12 \text{ songs}}{15 \text{ min}} = \frac{0.8}{1 \text{ min}}$

They are downloading
at the same
rate!

3-104)

a) $-2 + x = -x + 2$

$$\begin{array}{ccc} -2 & & -2 \\ \hline \end{array}$$

$$-4 + x = -x$$

$$\begin{array}{ccc} -x & & -x \\ \hline \end{array}$$

$$-4 = -2x$$

$$\begin{array}{ccc} -2 & & -2 \\ \hline \end{array}$$

$$2 = x$$

$$b) -(x-1) = -4x-2$$

$$-x+1 = -4x-2$$

$$\begin{array}{r} +x \qquad \qquad +x \\ \hline 1 = -3x-2 \end{array}$$

$$\begin{array}{r} +2 \qquad \qquad +2 \\ \hline 3 = -3x \end{array}$$

$$\begin{array}{r} \hline 3 = -3x \end{array}$$

$$\begin{array}{r} -3 \quad -3 \\ \hline -1 = x \end{array}$$

$$-1 = x$$

$$c) 2+3x = 3x+2,$$

ALL Numbers!

$$d) -(-x+6) = -3x$$

$$x-6 = -3x$$

$$\begin{array}{r} -x \qquad \qquad -x \\ \hline -6 = -4x \end{array}$$

$$\begin{array}{r} -6 = -4x \\ \hline -4 \quad -4 \end{array}$$

$$\begin{array}{r} -4 \quad -4 \\ \hline 1.5 = x \end{array}$$

$$1.5 = x$$

3-105)

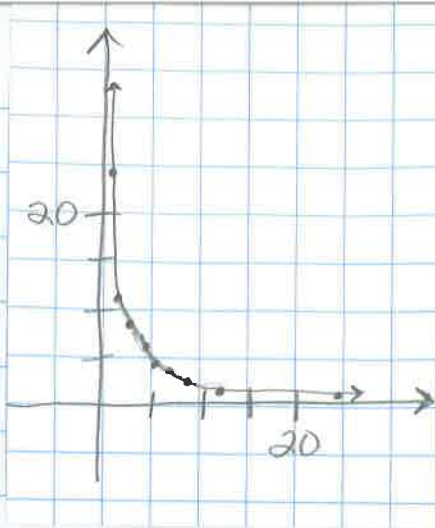
In(x)	1	2	3	4	5	6	8	12	24	x
out(y)	24	12	8	6	4.8	4	3	2	1	24 ÷ x

a) The product of x and y are always 24.

$$b) xy = 24 \quad \text{or} \quad y = \frac{24}{x}$$

c) see next page →

C.



3-106)

a) $5x - 3$

Three less than 5 times x

b) $2(x + y)$

Twice the sum of x and y .

c) $3 - (x + 5)$

Three decreased by the sum of x and 5.