

Practice 4.1 - Solutions

1. a) $\frac{270 \text{ km}}{3 \text{ h}} = 90 \frac{\text{km}}{\text{h}}$

c) $\frac{\$320}{40} = \$8/\text{h}$

b) $\frac{375 \text{ km}}{25 \text{ L}} = 15 \frac{\text{km}}{\text{L}}$

2 a) $\frac{\$300}{4 \text{ m}} = \$75/\text{m}$

$C = 75x$
 (C is labeled "cost" and x is labeled "# of metres")

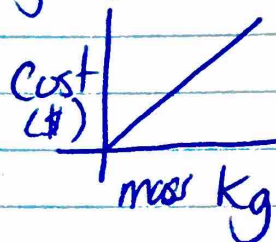
b) cost per metre

c) $C = 75(7)$
 $= \$525$

3 a)

mass (kg)	cost (\$)
0	0
1	2.18
2	4.36
3	6.54
4	8.72
5	10.90

b) if graphing by hand



c) $C = 2.18x$
 (C is labeled "cost (\$)" and x is labeled "mass (kg)")

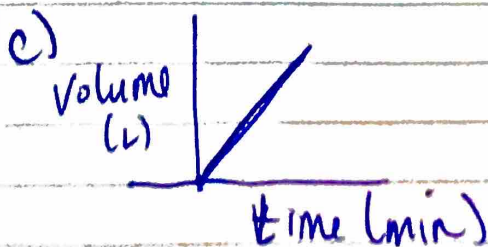
4 a) $C = 9.50x$
 (C is labeled "cost (\$)" and x is labeled "# of hours")

b) $C = 9.50(12)$
 $= \$114$

5 a) $\frac{200 \text{ L}}{2 \text{ min}} = 100 \text{ L/min}$

b) $V = 100(t)$
 (V is labeled "volume (L)" and t is labeled "time (min)")

d) $V = 100(30)$
 $= 3000 \text{ L}$



e) $100000 = 100t$
 $t = 1000 \text{ min}$
 $= 16.7 \text{ hours}$