## P. 24

## Act 1

a) $f(x)=60$
b) Yes
c) 1. See teacher
2. Horizontal half-line
d) when $x$ varies from 10 to 20 :

$$
a=\underline{Y 2-Y 1}=\underline{60-60}=\underline{0}=0 \text { slope }
$$

\#1.
a) $\$ 600$
b) 0
c) $\operatorname{dom} p=[0,24]$ and ran $p=\{600\}^{* * *}$ notice the brace or curly brackets $\ldots$ not an interval but rather to show you the number set is simply one number $y=b$ and in theis case $\mathrm{y}=600$.
p. 27
\#3. a) $y=10 x$
b) $f$ is of direct variation
c)

| $x$ | 0 | 2 | 4 | 6 |
| :--- | :--- | :--- | :--- | :--- |
| $y$ | 0 | 20 | 40 | 60 |

d) Yes, 10 .
e) come see the teacher for answer
\#4. a) $-0.12 \mathrm{I} / \mathrm{km}$
b) A decreasing situation, since the rate of change -0.12 is negative.
c) The initial value is 72 . It represents the quantity of gas in the tank at the beginning of the trip.
d) 30 liters
e) 1.600 km
2. The zero of function $f$
f) 475 km
p. 28
\#6. A) $y=0.4 x-32000$
b) 1.80000 . The store must make $\$ 80000$ in sales to have a net revenue of zero.
2. -3200. The initial value corresponds to the fixed monthly cost of \$32000.
c) Come see you teacher for answer
d) The function is increasing, since the rate of change is positive.
e) 1. [0,200 000] 2. [-32 000, 48000$]$
f) 1. $[0,80000] \quad$ 2. $[80000,200000]$

