

A car starts from home and travels for 3 hours at 80 mph and then slows to 50 mph to conserve gas.

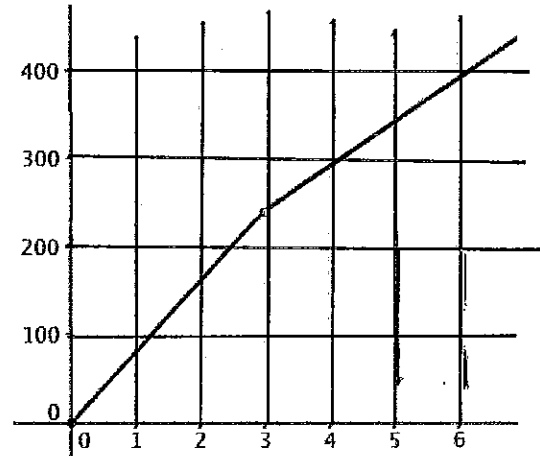
Time	Distance
0	0
1	80
2	160
2.5	200
3	240
5	340

$$Y = 80X$$

for $0 < x \leq 3$ and

$$Y = 50(X - 3) + 240$$

For $x > 3$



A car leave home at 2:00 and travels for 2 hours at 40 mph, stops to eat for 1 hour and then drives away at 60 mph.

Time	Distance
0	0
1	40
2	80
2.5	80
3	80
5	200

$$Y = 40X$$

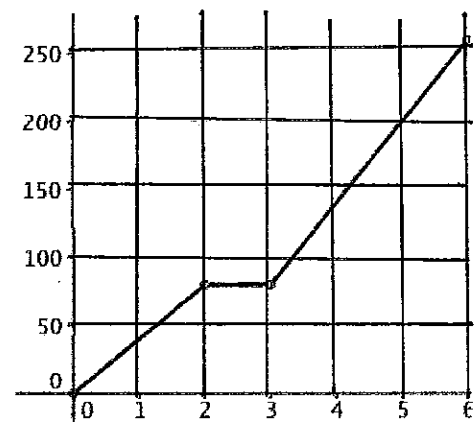
for $0 < x \leq 2$ and

$$Y = 80$$

For $2 < x \leq 3$ and

$$Y = 60(X - 3) + 80$$

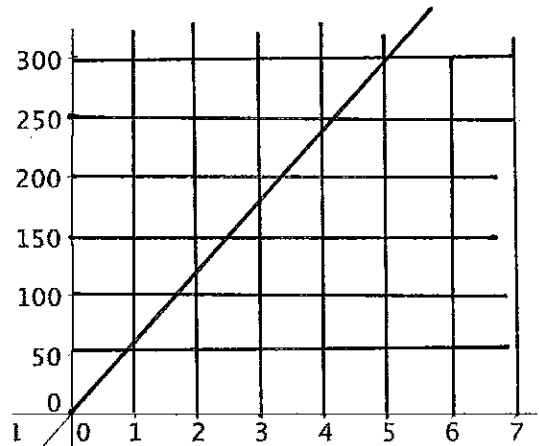
For $X > 3$



A car starts from home and travels at a constant rate of 60 mph while driving down the road.

$$Y = 60X$$

Time	Distance
0	0
1	60
2	120
2.5	150
3	180
5	300



A car begins 20 miles from home and travels at a constant rate of 50 mph while driving down the road.

$$Y = 50X + 20$$

Time	Distance
0	20
1	70
2	120
2.5	145
3	170
5	270

