

## Economics 1 Answer Topics

### Week 8

Exercises 9.5c 9.6b 9.7b 9.8d 9.9d 9.12c 9.13a 9.17a 9.18c 9.19c

#### Exercise 9.4

- Short run, because there are fixed costs ( $FC = 81$ ).
- $FC = 81$ ,  $VC = Q^2$ ,  $AC = 81/Q + Q$ ,  $MC = 2Q$ .
- $P = 24$ ;  $MC = 24 \Leftrightarrow Q = 12$ ; Profit =  $24 \times 12 - (81 + 12^2) = 63$ .

#### Exercise 9.14

- $q = p/2$ ,  $S = 100q = 50p$ .
- $p = 2$ ,  $Q = 100$ .
- Price and quantity increase.

Exercise 9.15  $Q = 2/3$ .

#### Exercise 9.16

a)

Q	VC	TC	AVC	ATC	MC
0	0	100	-	-	-
10	200	300	20	30	20
20	300	400	15	20	10
30	480	580	16	19.3	18
40	700	800	17.5	20	22
50	1000	11000	20	22	30

- 19.3 and 15.
- She will earn a profit, so she should produce.
- She makes a loss, but a lower loss than if she did not produce. So she should produce.