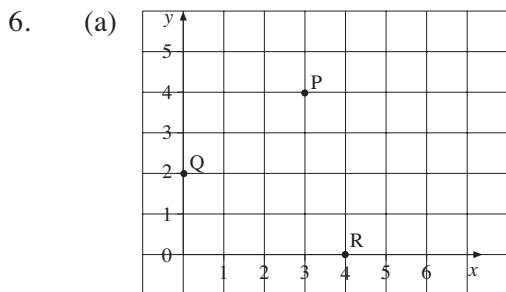


Coordinates

Answers

1 Positive Coordinates

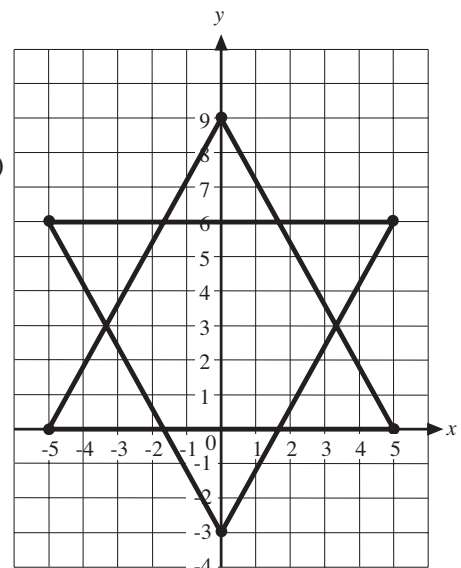
1. A (0, 4), B (1, 3), C (2, 1), D (3, 0), E (4, 3), F (5, 2)
2. Rocky Point (2, 8), Landing Stage (2, 2), Old Ben's Cottage (3, 5)
Old Tower (4, 3), Café (7, 6), Sandy Beach (9, 3), Camp Site (10, 6)
3. (a) rectangle (b) triangle (c) rhombus
(d) pentagon (e) hexagon
4. (a) J: (1, 2), (1, 1), (2, 1), (2, 5), (1, 5) and (3, 5)
S: (4, 1), (6, 1), (6, 3), (4, 3), (4, 5) and (6, 5)
5. (a) (2, 3), (3, 2), (4, 3), (5, 2), (6, 3)



- (b) (i) A (2, 1) (ii) (B) (1, 5)

2 Coordinates

1. A (2, 5), B (4, 3), C (2, 1),
D (2, -2), E (5, -3), F (3, -4),
G (-5, 4), H (-3, 3), I (-5, 2),
J (-4, -2), K (-2, -3), L (-6, -5)
2. (a) (5, -4), (6, -3) and (-6, -5)
(b) Albany to Alice Springs
(c) Broome to Perth
3. (a) (0, 4), (12.5, -5.5), (-12, -1), (-6.5, -3.5), (-1, -7)
(b) (-1, 1) (c) (10, 0) to (-7.5, -10.5)
(d) (-17, -2) (e) (10, 7)
4. (a) triangle
(b) six-pointed star (see diagram)

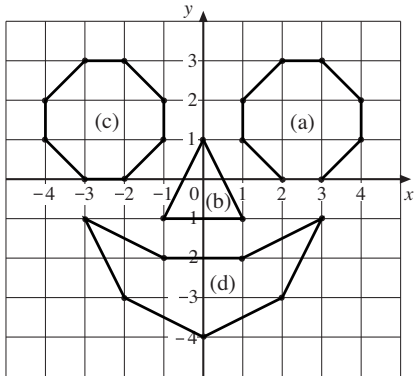


Coordinates

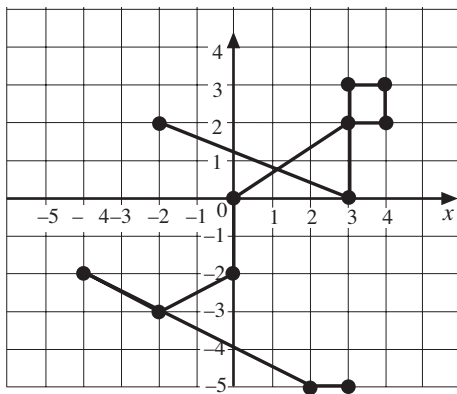
Answers

2

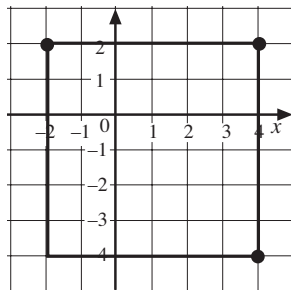
5.



6. (b)

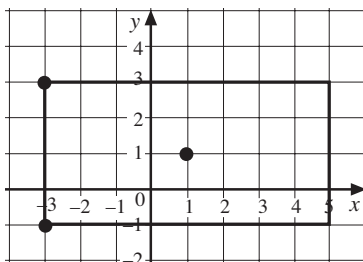


7. (a)



(b) (1, -1)

8. (a)

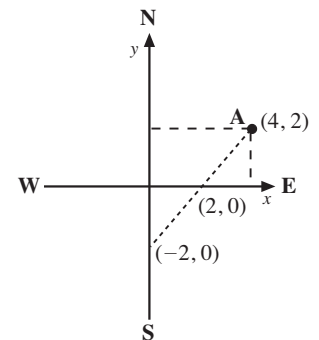


(b) (5, -1), (5, 3)

9. (a) 2 units

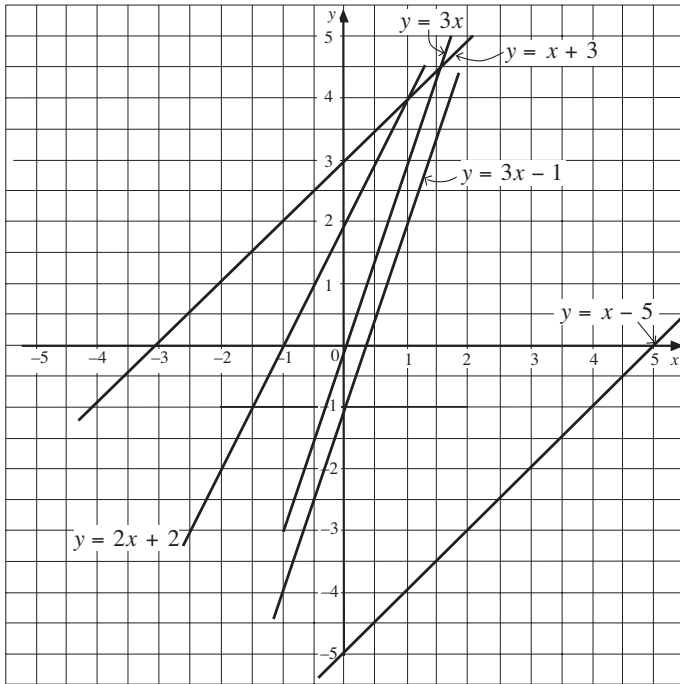
(b) 4 units

(c) $2 \times \sqrt{8} = 4\sqrt{2}$



3 Plotting Straight Lines

1. (a) (4, 6), (1, 3), (-3, 1) (e) (0, 2)
2. (a) (3, 7), (1, 3), (-2, -3) (d) Yes
3. (a) (3, 7), (0, -2), (-2, -8) (d) No
- 4.



5. (a)

m	0	10	25
p	0	40	100

 (b) (0, 0), (10, 40), (25, 100)

(d)

	<i>Mark</i>	<i>Percentage</i>
Tyson	15	60
Carlyle	21	84
Shanice	18	72
Carl	20	80
Winston	15	60

6. (a)

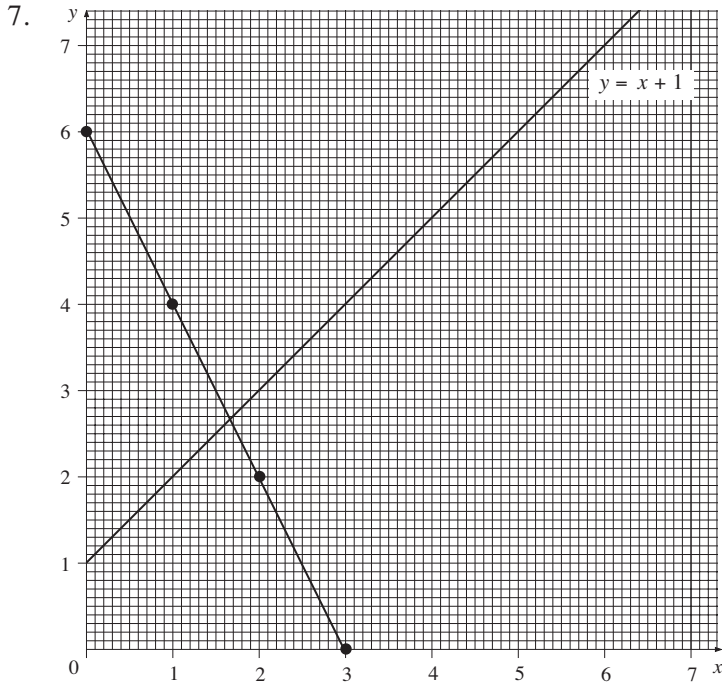
$^{\circ}\text{C}$	0	20	100
$^{\circ}\text{F}$	32	68	212

 (c) about 27°C (d) 86°F

Coordinates

Answers

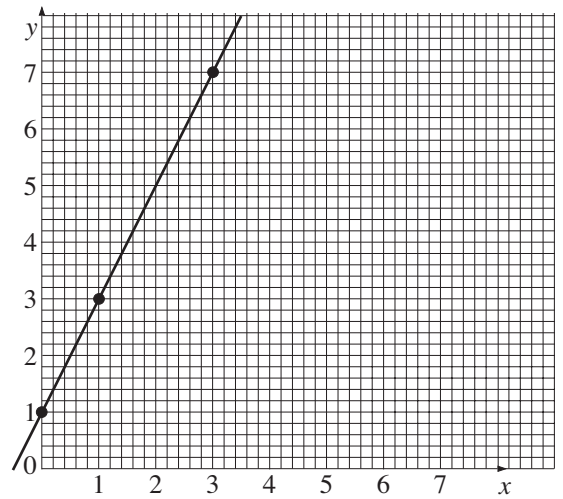
3



8. (a)

x	y
0	1
1	3
3	7

(b)



(c) $y = 2x + 1$ (d) 4

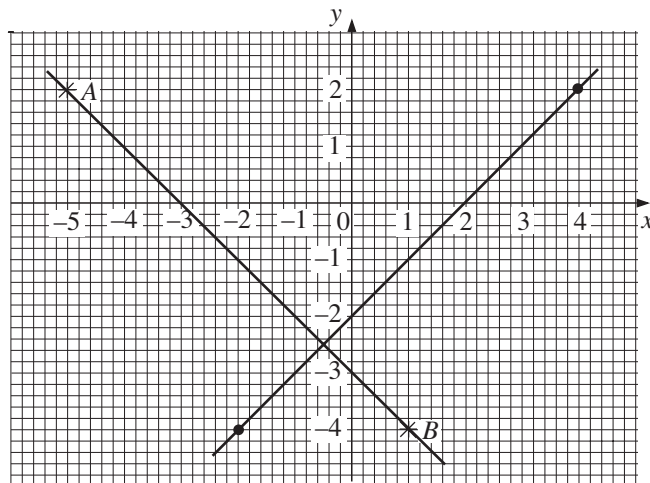
9. (a) $A (-5, 2)$, $B (1, -4)$

(b)

x	-2	0	2	3	4
y	-4	-2	0	1	2

(c) see graph

(d) $\left(-\frac{1}{2}, -\frac{5}{2}\right)$



Coordinates

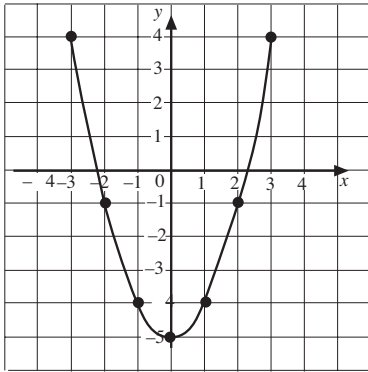
Answers

4 Plotting Curves

1. (a)

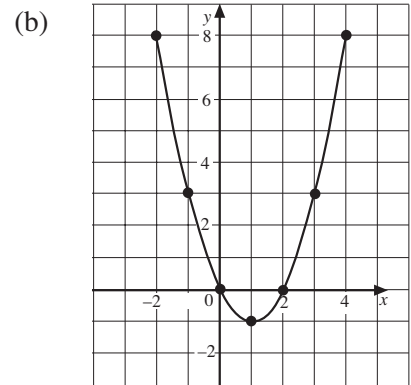
x	-3	-2	-1	0	1	2	3
y	4	-1	-4	-5	-4	-1	4

(b) $(-3, 4)$, $(-2, -1)$, $(-1, -4)$, $(0, -5)$, $(1, -4)$, $(2, -1)$, $(3, 4)$



2. (a)

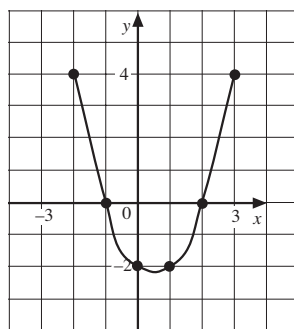
x	-2	-1	0	1	2	3	4
y	8	3	0	-1	0	3	8



3. (a)

x	-2	-1	0	1	2	3
y	4	0	-2	-2	0	4

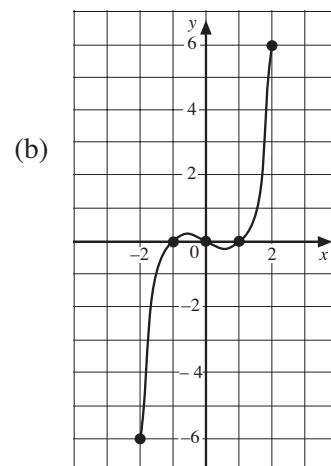
(b) 0.5 (c) -2.25



4. (a)

x	-2	-1	0	1	2
y	-6	0	0	0	6

(c) $(-0.5, 0.375)$, $(0.5, -0.375)$



Coordinates

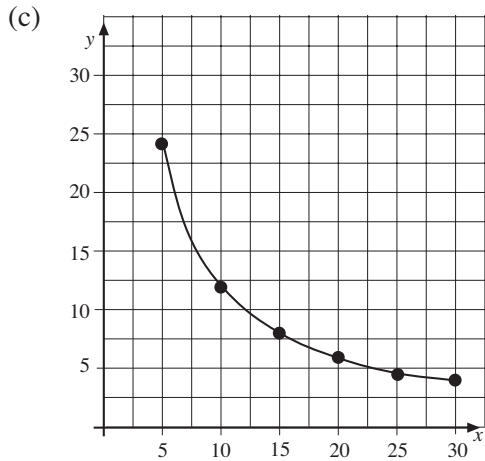
Answers

4

5. (a) $xy = \text{area} = 120 \text{ cm}^2$

(b)

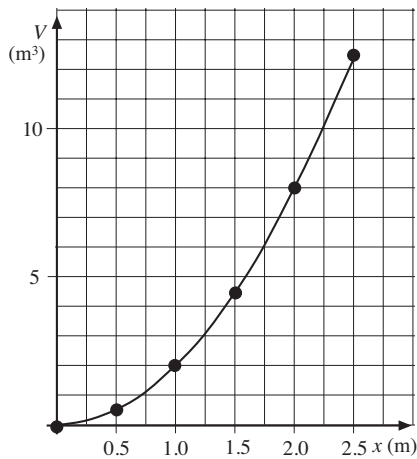
x	5	10	15	20	25	30
y	24	12	8	6	4.8	4



(d) width about 17 cm

(e) about 8.6 cm

6. (a) $\text{Volume} = 2 \times x \times x = 2x^2$



(b)

x	0	0.5	1.0	1.5	2.0	2.5
V	0	0.5	2.0	4.5	8.0	12.5

(c) about 9.7 m^3

(d) (i) 2.2 m (ii) 1.6 m

7. (a)

t	0	1	2	3	4
h	0	13	16	9	-8

(b) about 3.6 seconds

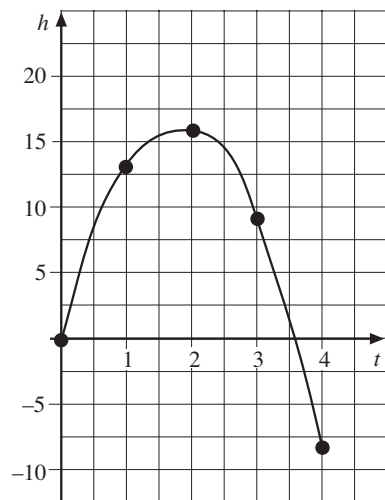
(c) just over 16 metres

8. (a)

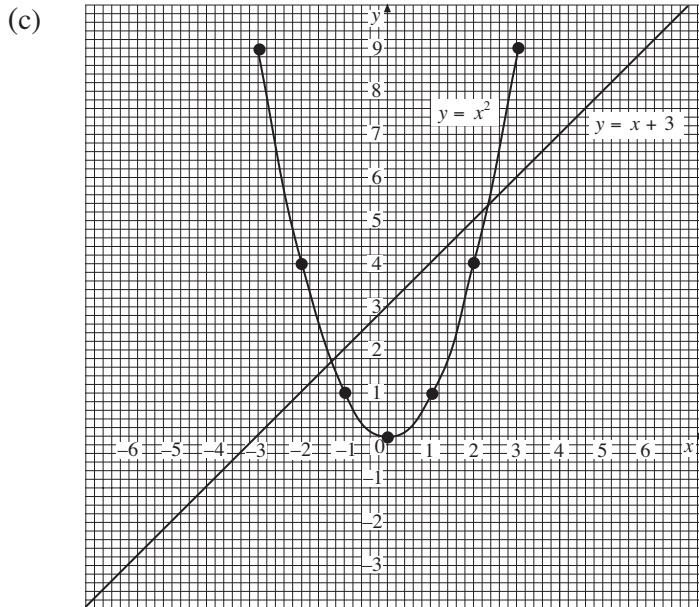
x	-3	-2	-1	0	1	2	3
y	0	1	2	3	4	5	6

(b)

x	-3	-2	-1	0	1	2	3
y	9	4	1	0	1	4	9



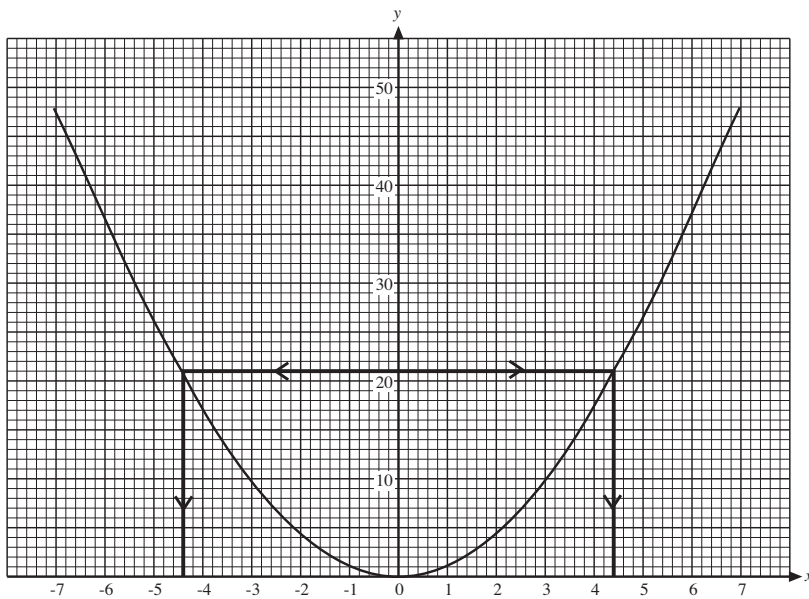
4



9. (a)

x	-5	5	6
y	25	25	36

(b)



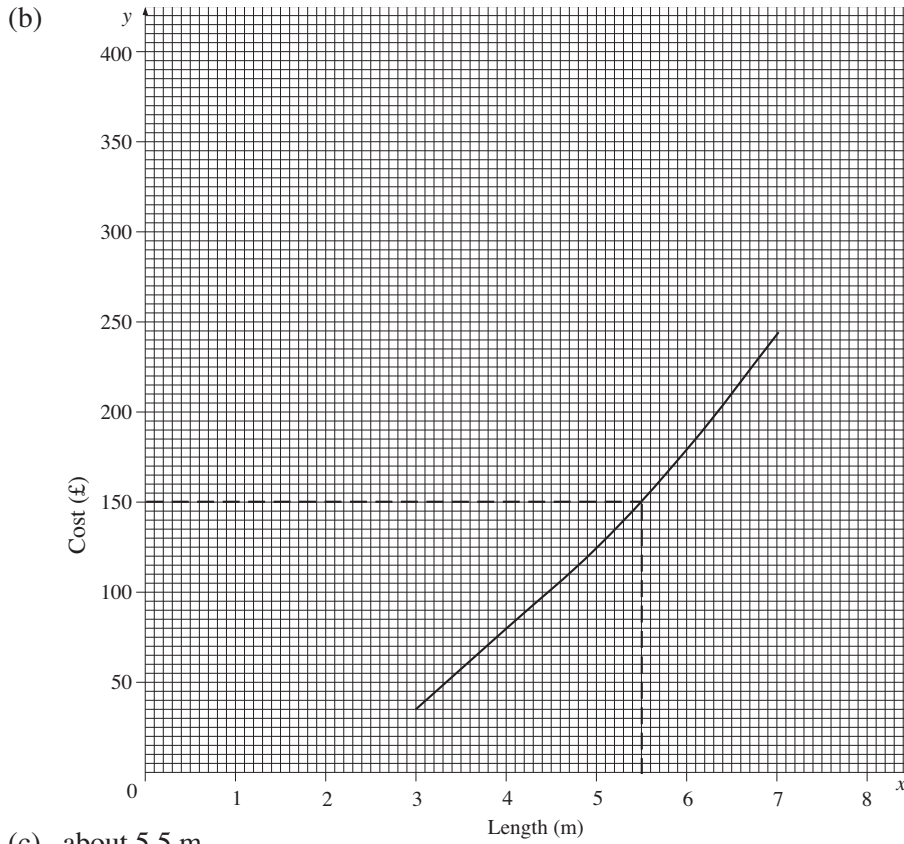
(c) $x \approx -4.4$ or 4.4

Coordinates

Answers

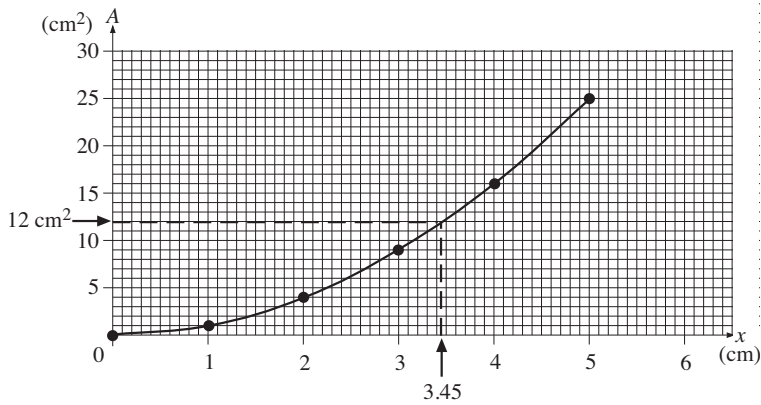
4

10. (a) £320



(c) about 5.5 m

11. (a)

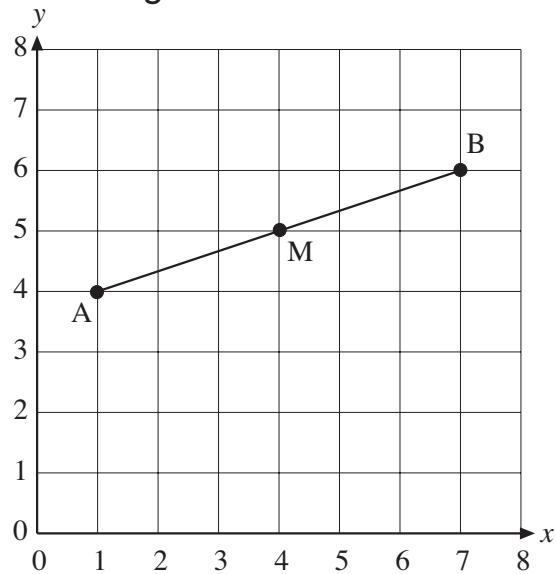


(b) $A = x^2$

(c) about 3.45 cm

5 Mid-Points of Line Segments

1. (a) and (b)

(c) The mid-point $M = (4, 5)$

- | | | | | |
|----|----------------|------------------|-----------------|-----------------|
| 2. | (a) (4, 6) | (b) (7, 5.5) | (c) (8.5, 7.5) | (d) (9, 5) |
| | (e) (6, 2) | (f) (8.5, 4) | (g) (10.5, 3.5) | (h) (9, 1.5) |
| 3. | (a) (6, 9) | (b) (12, 5) | (c) (6, 3) | (d) (8, 7) |
| | (e) (3.5, 2.5) | (f) (3.5, 6.5) | (g) (7.5, 8.5) | (h) (18.5, 2.5) |
| 4. | (a) (4, 4) | (b) (-0.5, 5) | (c) (0.5, -0.5) | (d) (4, -1) |
| | (e) (3, 1) | (f) (-0.5, -3.5) | (g) (-4, 0.5) | (h) (-0.5, 0) |
| 5. | (a) (3, -1.5) | (b) (0.5, -2.5) | (c) (-5, -6.5) | (d) (1.5, -1) |
| | (e) (0.5, 2.5) | (f) (7, -6) | (g) (4.5, -5.5) | (h) (-1, -7) |