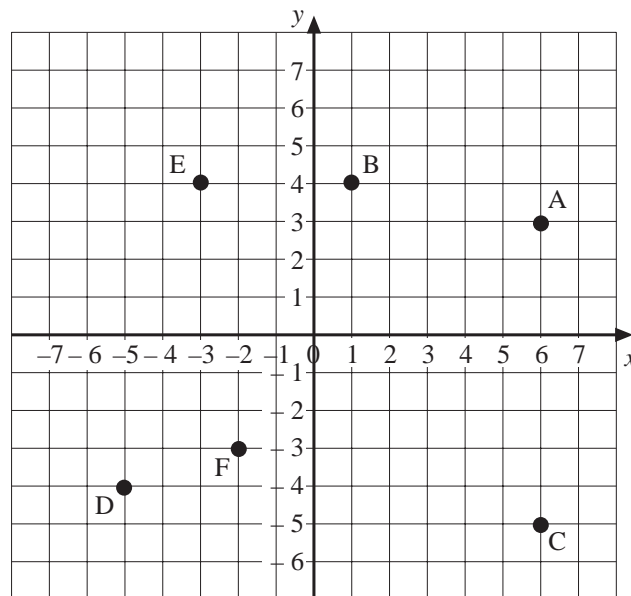


UNIT 14 *Straight Line Graphs***Revision Test 14.1**
(Standard)

1. Write down the coordinates of each of the points marked on the following diagram:

*(6 marks)*

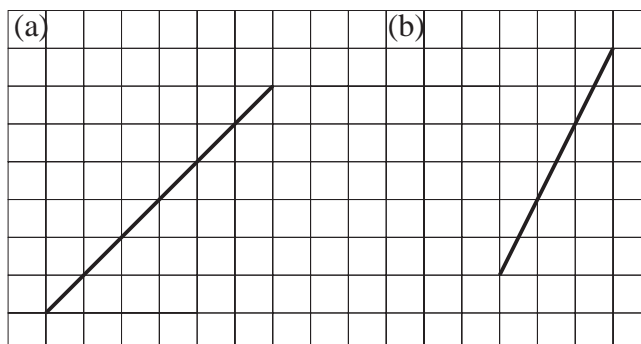
2. (a) Plot the points with the coordinates listed below, joining the points in order.

(2, 6), (4, 8), (6, 8), (8, 6), (6, 4), (4, 4), (2, 6)

- (b) What is the name of the shape you have drawn?

(7 marks)

3. Determine the gradient of each of the following lines:

*(4 marks)*

Revision Test 14.1

4. (a) Plot the points with coordinates,
 $(1, 3)$, $(2, 5)$, $(3, 7)$
- (b) Draw a straight line through these points.
- (c) Write down the coordinates of two other points on the line.
- (d) Write down the coordinates of the point where the line crosses the y-axis.
- (e) What is the gradient of the line?

(9 marks)

5. The coordinates of 3 corners of a square are listed below:

$(5, 2)$, $(-2, 2)$ and $(5, -5)$

- (a) Draw the square.
- (b) Write down the coordinates of the other corner of the square.

(4 marks)

UNIT 14 *Straight Line Graphs*

Revision Test 14.2 (Academic)

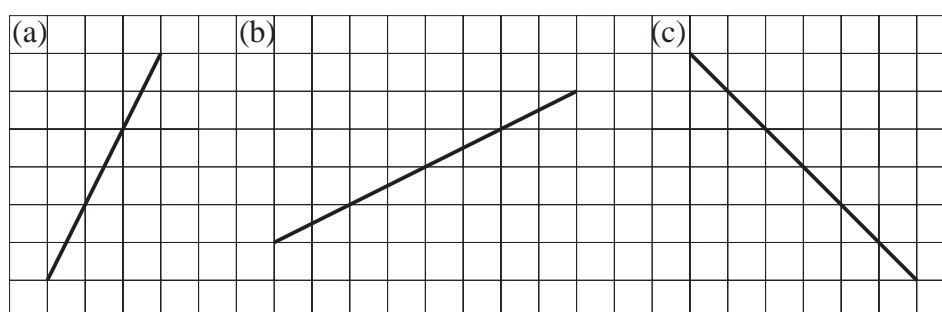
1. (a) Plot the points with coordinates,

$(-2, -3)$, $(3, -3)$, and $(3, 2)$

- (b) When you join up the points, what type of triangle have you drawn?

(4 marks)

2. Calculate the gradient of each of the following lines:



(6 marks)

3. The coordinates of three of the corners of a rectangle are listed below:

$(-2, 4)$, $(-3, 7)$ and $(4, 6)$

- (a) Draw the rectangle.

- (b) Write down the coordinates of the other corner.

(5 marks)

4. (a) Draw a line through the points with coordinates,

$(3, 4)$, $(4, 6)$ and $(5, 8)$

- (b) What is the *gradient* of the line?

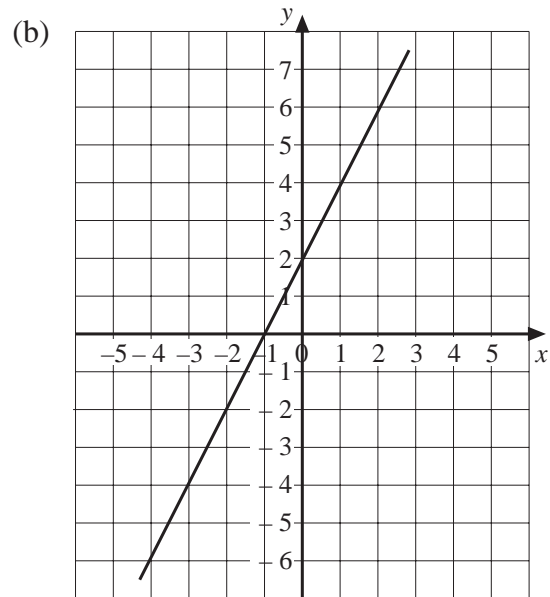
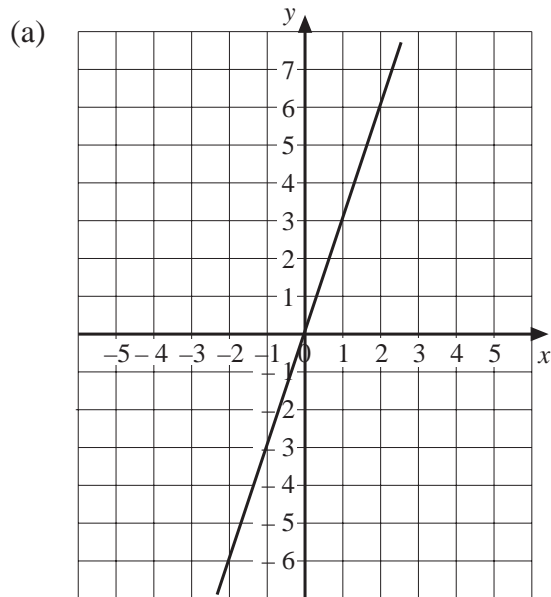
- (c) What is the *intercept* of the line?

- (c) What is the *equation* of the line?

(7 marks)

Revision Test 14.2

5. Determine the equation of each of the following lines:



(8 marks)

UNIT 14 *Straight Line Graphs*

Revision Test 14.3 (Express)

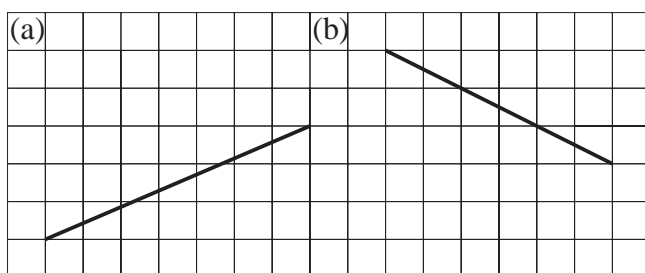
1. The coordinates of 3 corners of a rhombus are:

$(4, -2)$, $(6, 2)$ and $(8, 0)$

- (a) Draw the rhombus.
(b) Write down the coordinates of the fourth corner of the rhombus.

(3 marks)

2. Calculate the gradient of each of the following lines:

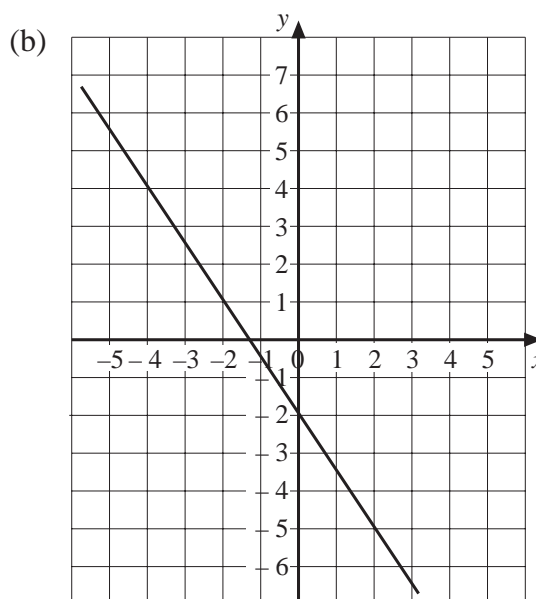
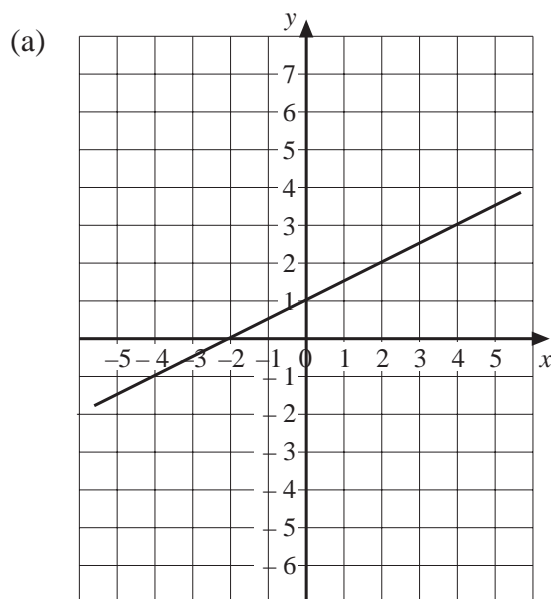


(4 marks)

3. (a) Draw the lines $y = x + 4$ and $y = 10 - 2x$, on the same set of axes.
(b) Write down the coordinates of the point where the lines cross.

(5 marks)

4. Determine the equation of each of the following lines:



(8 marks)

Revision Test 14.3 (Express)

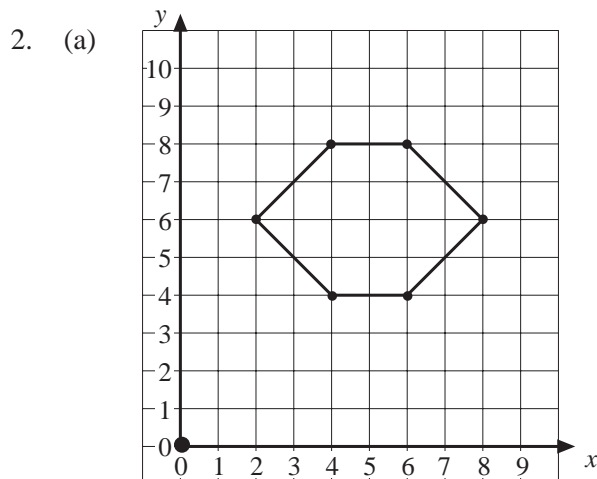
5. Determine the equation of the straight lines that pass through the points with coordinates:
- (a) $(0, 3)$ and $(5, 7)$,
 - (b) $(1, 7)$ and $(3, 1)$

(10 marks)

Revision Test 14.1 (Standard)

Answers

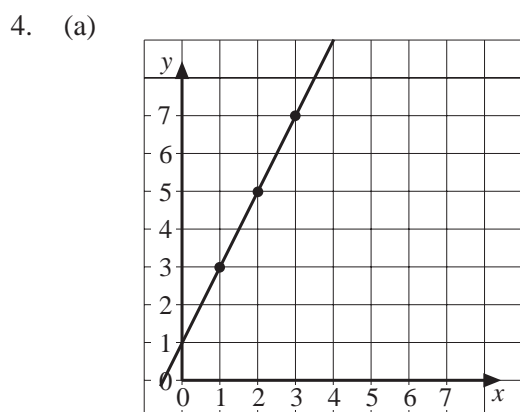
1. A (6, 3) B1
 B (1, 4) B1
 C (6, -5) B1
 D (-5, -4) B1
 E (-3, 4) B1
 F (-2, -3) B1 (6 marks)



(- 1 for each
incorrect point) B6

- (b) Hexagon B1 (7 marks)

3. (a) $\frac{6}{6} = 1$ M1 A1
 (b) $\frac{6}{3} = 2$ M1 A1 (4 marks)



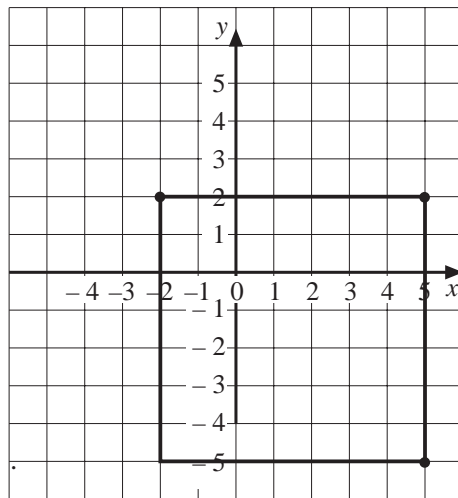
(- 1 for each
incorrect point) B3

- (b) straight line B1
 (c) e.g. (0, 1), (4, 9), (5, 11) etc. B1 B1
 (d) (0, 1) B1
 (e) 2 B2 (9 marks)

Revision Test 14.1 (Standard)

Answers

5. (a)



(- 1 for each error) B2
square B1

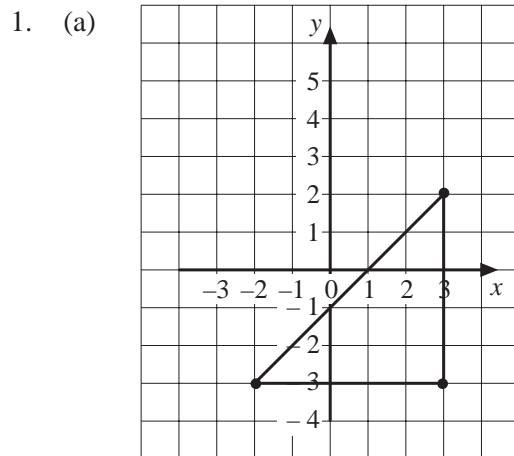
(b) $(-2, -5)$

B1 (4 marks)

(TOTAL MARKS 30)

Revision Test 14.2 (Academic)

Answers



points B1 B1 B1

(b) Right-angled, isosceles triangle

B1

(4 marks)

2. (a) $\frac{6}{3} = 2$

M1 A1

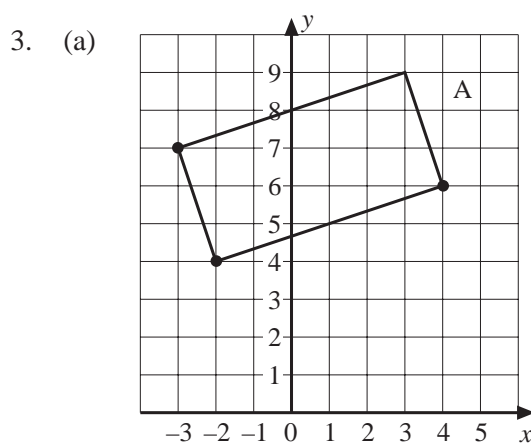
(b) $\frac{4}{8} = \frac{1}{2}$

M1 A1

(c) $\frac{-6}{6} = -1$

M1 A1

(6 marks)



points B2
(- 1 for each error)

rectangle and extra point B2

(b) (3, 9)

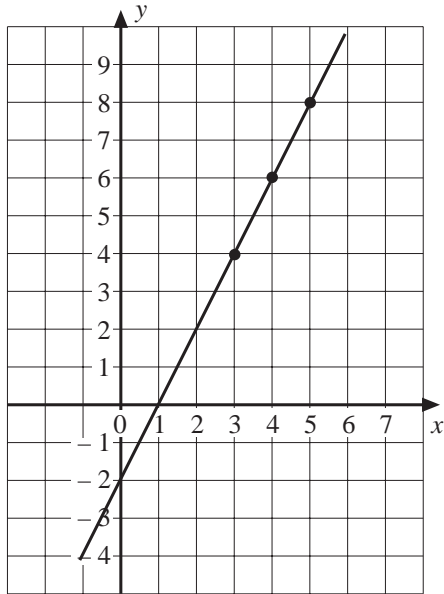
B1

(5 marks)

Revision Test 14.2 (Academic)

Answers

4. (a)



points B1 B1 B1

- (b) 2

B2
- (c) -2

B1
- (d) $y = 2x - 2$

B1

(7 marks)

5. (a) $m = 3$

B2

$c = 0$

B1

$y = 3x$

B1
- (b) $m = 2$

B2

$c = 2$

B1

$y = 2x + 2$

B1

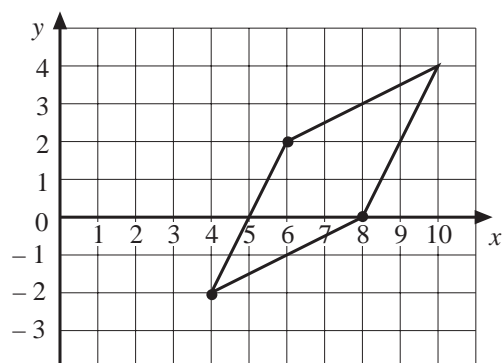
(8 marks)

(TOTAL MARKS 30)

Revision Test 14.3 (Express)

Answers

1. (a)



points
(- 1 for each error)

B2

(b) (10, 4)

B1

(3 marks)

2. (a) $\frac{3}{7}$

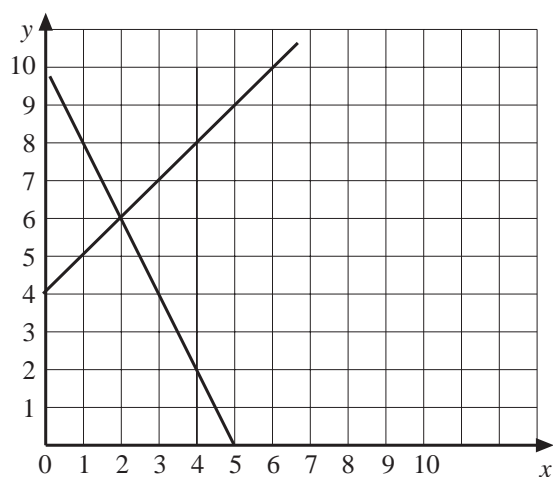
B2

(b) $\frac{-3}{6} = -\frac{1}{2}$

M1 A1

(4 marks)

3. (a)



B2

B2

(b) (2, 6)

B1

(5 marks)

4. (a) $m = \frac{1}{2}$

B2

 $c = 1$

B1

 $y = \frac{1}{2}x + 1$

B1

(b) $m = -\frac{3}{2}$

B2

 $c = -2$

B1

 $y = -\frac{3}{2}x - 2$

B1

(8 marks)

Revision Test 14.3 (Express)

Answers

5. (a) $m = \frac{7-3}{5-0} = \frac{4}{5}$

M1 A1

$$c = 3$$

B1

$$y = \frac{4}{5}x + 3$$

B1

(b) $m = \frac{1-7}{3-1} = -3$

M1 A1

$$y = -3x + c$$

B1

$$7 = -3 + c$$

M1

$$c = 10$$

A1

$$y = -3x + 10$$

A1

(10 marks)

(TOTAL MARKS 30)