2.95 Coordinates, Reflection and Translation: 2-hour Pack

Total Marks

GL ASSESSMENT GL-11PLUS-MATHS · Calculators not allowed · about 120 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 What are the coordinates of the midpoint of the line joining (5, 4) and (1, 0)?

- ☐ A) (4, 2)
- ☐ B) (2, 3)
- ☐ C) (6, 4)
- ☐ D) (3, 2)
- ☐ E) (2, 2)

---

2 The point A is at (-3, 1). A is reflected in the x-axis. What are the new coordinates of A?

- ☐ A) (3, -1)
- ☐ B) (1, -3)
- ☐ C) (-3, -1)
- ☐ D) (3, 1)
- ☐ E) (4, 1)

---

3 The point P is at (8, -5). P is translated 3 left and 4 up. What are the new coordinates of P?

- ☐ A) (11, -9)
- ☐ B) (5, -1)
- ☐ C) (11, -1)
- ☐ D) (5, -9)
- ☐ E) (12, -8)

© Revision Library | revisionlibrary.co.uk

4 Three corners of a rectangle are at (3, -4), (8, -4) and (8, -2). What are the coordinates of the fourth corner?

- [ ] A) (-2, 3)
- [ ] B) (3, -6)
- [ ] C) (3, -1)
- [ ] D) (13, -2)
- [ ] E) (3, -2)

---

5 What are the coordinates of the midpoint of the line joining (-3, 7) and (-11, 17)?

- [ ] A) (-7, 12)
- [ ] B) (-14, 24)
- [ ] C) (4, 5)
- [ ] D) (-6, 12)
- [ ] E) (12, -7)

---

6 The point A is at (3, -2). A is reflected in the x-axis. What are the new coordinates of A?

- [ ] A) (-3, -2)
- [ ] B) (-2, -2)
- [ ] C) (-3, 2)
- [ ] D) (3, 2)
- [ ] E) (-2, 3)

---

7 The point P is at (-1, 5). P is translated 4 left and 1 up. What are the new coordinates of P?

- [ ] A) (-5, 4)
- [ ] B) (3, 4)
- [ ] C) (-5, 6)
- [ ] D) (0, 1)
- [ ] E) (-4, 1)

© Revision Library | revisionlibrary.co.uk

8 What are the coordinates of the midpoint of the line joining (5, 6) and (13, 0)?

- ☐ A) (10, 3)
- ☐ B) (18, 6)
- ☐ C) (4, 3)
- ☐ D) (3, 9)
- ☐ E) (9, 3)

---

9 The point A is at (7, 4). A is reflected in y = 2. What are the new coordinates of A?

- ☐ A) (-7, 4)
- ☐ B) (4, 7)
- ☐ C) (-7, -4)
- ☐ D) (7, 0)
- ☐ E) (-6, -4)

---

10 The point P is at (5, -1). P is translated 1 right and 1 up. What are the new coordinates of P?

- ☐ A) (4, -2)
- ☐ B) (6, 0)
- ☐ C) (4, 0)
- ☐ D) (1, 1)
- ☐ E) (6, -2)

---

11 What are the coordinates of the midpoint of the line joining (-7, -3) and (3, 7)?

- ☐ A) (-4, 4)
- ☐ B) (2, -2)
- ☐ C) (-2, 2)
- ☐ D) (5, 5)
- ☐ E) (-1, 2)

---

12 The point A is at (-7, 6). A is reflected in the x-axis. What are the new coordinates of A?

- ☐ A) (-7, -6)
- ☐ B) (7, -6)
- ☐ C) (6, -7)
- ☐ D) (7, 6)
- ☐ E) (8, 6)

© Revision Library | revisionlibrary.co.uk

13 Three corners of a rectangle are at (-5, 2), (-5, -1) and (0, -1). What are the coordinates of the fourth corner?

- [ ] A) (2, 0)
- [ ] B) (0, -4)
- [ ] C) (0, 2)
- [ ] D) (-10, 2)
- [ ] E) (0, 3)

---

14 The point P is at (4, 8). P is translated 6 left and 4 up. What are the new coordinates of P?

- [ ] A) (-2, 12)
- [ ] B) (10, 4)
- [ ] C) (-2, 4)
- [ ] D) (8, 2)
- [ ] E) (10, 12)

---

15 Three corners of a rectangle are at (4, 2), (4, 6) and (-2, 6). What are the coordinates of the fourth corner?

- [ ] A) (-2, 10)
- [ ] B) (-2, 3)
- [ ] C) (10, 2)
- [ ] D) (-2, 2)
- [ ] E) (-1, 2)

---

16 What are the coordinates of the midpoint of the line joining (6, 7) and (0, 9)?

- [ ] A) (3, 1)
- [ ] B) (4, 8)
- [ ] C) (6, 16)
- [ ] D) (8, 3)
- [ ] E) (3, 8)

© Revision Library | revisionlibrary.co.uk

17 The point A is at (-7, 5). A is reflected in y = -1. What are the new coordinates of A?

- [ ] A) (8, -5)
- [ ] B) (7, -5)
- [ ] C) (-7, -7)
- [ ] D) (7, 5)
- [ ] E) (5, -7)

---

18 Three corners of a rectangle are at (2, -1), (2, 2) and (-3, 2). What are the coordinates of the fourth corner?

- [ ] A) (-3, 5)
- [ ] B) (7, -1)
- [ ] C) (-1, -3)
- [ ] D) (-3, -1)
- [ ] E) (-2, -1)

---

19 What are the coordinates of the midpoint of the line joining (-7, 1) and (-1, -7)?

- [ ] A) (-3, -3)
- [ ] B) (6, -8)
- [ ] C) (-4, -3)
- [ ] D) (-8, -6)
- [ ] E) (3, 4)

---

20 The point A is at (7, 1). A is reflected in the y-axis. What are the new coordinates of A?

- [ ] A) (-6, 1)
- [ ] B) (-7, -1)
- [ ] C) (1, 7)
- [ ] D) (7, -1)
- [ ] E) (-7, 1)

© Revision Library | revisionlibrary.co.uk

21 Three corners of a rectangle are at (-3, 3), (-3, -1) and (-1, -1). What are the coordinates of the fourth corner?

- ☐ A) (-5, 3)
- ☐ B) (-1, 3)
- ☐ C) (0, 3)
- ☐ D) (-1, -5)
- ☐ E) (-1, 4)

---

22 What are the coordinates of the midpoint of the line joining (-7, 8) and (-3, 6)?

- ☐ A) (4, -2)
- ☐ B) (-10, 14)
- ☐ C) (2, 1)
- ☐ D) (-4, 7)
- ☐ E) (-5, 7)

---

23 What are the coordinates of the midpoint of the line joining (-5, 1) and (-1, 1)?

- ☐ A) (-2, 1)
- ☐ B) (2, 0)
- ☐ C) (1, -3)
- ☐ D) (-3, 1)
- ☐ E) (-6, 2)

---

24 The point P is at (5, -1). P is translated 3 left and 1 up. What are the new coordinates of P?

- ☐ A) (8, -2)
- ☐ B) (6, -4)
- ☐ C) (2, 0)
- ☐ D) (-3, 1)
- ☐ E) (8, 0)

© Revision Library | revisionlibrary.co.uk

25 Three corners of a rectangle are at (2, -4), (7, -4) and (7, -1). What are the coordinates of the fourth corner?

- [ ] A) (2, -1)
- [ ] B) (12, -1)
- [ ] C) (2, -7)
- [ ] D) (2, 0)
- [ ] E) (3, -1)

---

26 What are the coordinates of the midpoint of the line joining (1, -4) and (-5, -4)?

- [ ] A) (3, 0)
- [ ] B) (-4, -2)
- [ ] C) (-1, -4)
- [ ] D) (-4, -8)
- [ ] E) (-2, -4)

---

27 The point A is at (5, 1). A is reflected in x = -2. What are the new coordinates of A?

- [ ] A) (-5, 1)
- [ ] B) (-9, 1)
- [ ] C) (1, 5)
- [ ] D) (5, -1)
- [ ] E) (-5, -1)

---

28 The point P is at (7, 4). P is translated 7 left and 7 down. What are the new coordinates of P?

- [ ] A) (14, 11)
- [ ] B) (0, 11)
- [ ] C) (-7, -7)
- [ ] D) (0, -3)
- [ ] E) (14, -3)

© Revision Library | revisionlibrary.co.uk

29 Three corners of a rectangle are at (0, 3), (-4, 3) and (-4, -3). What are the coordinates of the fourth corner?

- [ ] A) (0, -2)
- [ ] B) (0, 9)
- [ ] C) (0, -3)
- [ ] D) (1, -3)
- [ ] E) (-8, -3)

---

30 What are the coordinates of the midpoint of the line joining (1, -3) and (-3, -9)?

- [ ] A) (2, 3)
- [ ] B) (-6, -1)
- [ ] C) (-2, -12)
- [ ] D) (0, -6)
- [ ] E) (-1, -6)

---

31 The point A is at (0, 6). A is reflected in x = 4. What are the new coordinates of A?

- [ ] A) (9, 6)
- [ ] B) (8, 6)
- [ ] C) (6, 0)
- [ ] D) (0, -6)
- [ ] E) (0, 6)

---

32 The point P is at (6, 8). P is translated 6 left and 6 up. What are the new coordinates of P?

- [ ] A) (12, 2)
- [ ] B) (12, 14)
- [ ] C) (-6, 6)
- [ ] D) (0, 14)
- [ ] E) (0, 2)

© Revision Library | revisionlibrary.co.uk

33 Three corners of a rectangle are at (-5, 2), (1, 2) and (1, 6). What are the coordinates of the fourth corner?

- ☐ A) (7, 6)
- ☐ B) (-4, 6)
- ☐ C) (-5, 6)
- ☐ D) (-5, -2)
- ☐ E) (-5, 7)

---

34 The point A is at (-1, 3). A is reflected in the x-axis. What are the new coordinates of A?

- ☐ A) (-1, -3)
- ☐ B) (2, 3)
- ☐ C) (3, -1)
- ☐ D) (1, 3)
- ☐ E) (1, -3)

---

35 The point P is at (3, 0). P is translated 3 left and 1 up. What are the new coordinates of P?

- ☐ A) (6, -1)
- ☐ B) (0, 1)
- ☐ C) (-3, 1)
- ☐ D) (4, -3)
- ☐ E) (0, -1)

---

36 Three corners of a rectangle are at (0, -1), (0, -3) and (4, -3). What are the coordinates of the fourth corner?

- ☐ A) (4, -1)
- ☐ B) (-4, -1)
- ☐ C) (5, -1)
- ☐ D) (4, -5)
- ☐ E) (4, 0)

© Revision Library | revisionlibrary.co.uk

37 The point A is at (1, -6). A is reflected in y = -2. What are the new coordinates of A?

- [ ] A) (-1, -6)
- [ ] B) (-1, 6)
- [ ] C) (0, 6)
- [ ] D) (-6, 1)
- [ ] E) (1, 2)

---

38 The point P is at (-2, 6). P is translated 7 right and 3 up. What are the new coordinates of P?

- [ ] A) (5, 3)
- [ ] B) (5, 9)
- [ ] C) (7, 3)
- [ ] D) (1, 13)
- [ ] E) (-9, 3)

---

39 Three corners of a rectangle are at (-4, -4), (-2, -4) and (-2, 0). What are the coordinates of the fourth corner?

- [ ] A) (-3, 0)
- [ ] B) (-4, -8)
- [ ] C) (-4, 0)
- [ ] D) (-4, 1)
- [ ] E) (0, 0)

---

40 The point P is at (2, 3). P is translated 3 right and 1 down. What are the new coordinates of P?

- [ ] A) (1, 6)
- [ ] B) (-1, 4)
- [ ] C) (5, 4)
- [ ] D) (5, 2)
- [ ] E) (3, -1)

© Revision Library | revisionlibrary.co.uk

41 What are the coordinates of the midpoint of the line joining (-7, 8) and (-11, 2)?

- ☐ A) (-4, -6)
- ☐ B) (5, -9)
- ☐ C) (-9, 5)
- ☐ D) (2, 3)
- ☐ E) (-18, 10)

---

42 The point A is at (6, -7). A is reflected in x = 0. What are the new coordinates of A?

- ☐ A) (6, 7)
- ☐ B) (-6, -7)
- ☐ C) (-6, 7)
- ☐ D) (-7, 6)
- ☐ E) (-5, -7)

---

43 The point P is at (1, 2). P is translated 6 right and 5 up. What are the new coordinates of P?

- ☐ A) (6, 5)
- ☐ B) (-5, -3)
- ☐ C) (7, -3)
- ☐ D) (7, 7)
- ☐ E) (6, 8)

---

44 What are the coordinates of the midpoint of the line joining (-3, 8) and (-7, 18)?

- ☐ A) (2, 5)
- ☐ B) (13, -5)
- ☐ C) (-10, 26)
- ☐ D) (-4, 10)
- ☐ E) (-5, 13)

---

45 The point A is at (6, -3). A is reflected in the x-axis. What are the new coordinates of A?

- ☐ A) (-6, 3)
- ☐ B) (-3, 6)
- ☐ C) (6, 3)
- ☐ D) (-6, -3)
- ☐ E) (-5, -3)

© Revision Library | revisionlibrary.co.uk

46 The point P is at (3, -4). P is translated 3 right and 5 up. What are the new coordinates of P?

- ☐ A) (6, 1)
- ☐ B) (8, -1)
- ☐ C) (0, -9)
- ☐ D) (6, -9)
- ☐ E) (0, 1)

---

47 Three corners of a rectangle are at (5, 3), (5, 9) and (1, 9). What are the coordinates of the fourth corner?

- ☐ A) (1, 4)
- ☐ B) (1, 3)
- ☐ C) (9, 3)
- ☐ D) (3, 1)
- ☐ E) (1, 15)

---

48 What are the coordinates of the midpoint of the line joining (8, 6) and (0, 2)?

- ☐ A) (-8, -4)
- ☐ B) (5, 4)
- ☐ C) (4, 2)
- ☐ D) (4, 4)
- ☐ E) (8, 8)

---

49 The point A is at (-7, -4). A is reflected in $x = 3$. What are the new coordinates of A?

- ☐ A) (7, 4)
- ☐ B) (-4, -7)
- ☐ C) (7, -4)
- ☐ D) (14, -4)
- ☐ E) (13, -4)

© Revision Library | revisionlibrary.co.uk

50 Three corners of a rectangle are at (6, -3), (6, 0) and (2, 0). What are the coordinates of the fourth corner?

- [ ] A) (2, -3)
- [ ] B) (2, 3)
- [ ] C) (10, -3)
- [ ] D) (3, -3)
- [ ] E) (-3, 2)

---

51 Three corners of a rectangle are at (1, 6), (1, 1) and (5, 1). What are the coordinates of the fourth corner?

- [ ] A) (6, 6)
- [ ] B) (5, 6)
- [ ] C) (5, -4)
- [ ] D) (6, 5)
- [ ] E) (-3, 6)

---

52 What are the coordinates of the midpoint of the line joining (7, 2) and (5, -8)?

- [ ] A) (12, -6)
- [ ] B) (-3, 6)
- [ ] C) (6, -3)
- [ ] D) (7, -3)
- [ ] E) (1, 5)

---

53 The point A is at (-3, -7). A is reflected in y = 2. What are the new coordinates of A?

- [ ] A) (3, 7)
- [ ] B) (3, -7)
- [ ] C) (-7, -3)
- [ ] D) (-3, 11)
- [ ] E) (-3, 7)

© Revision Library | revisionlibrary.co.uk

54 The point P is at (-6, 3). P is translated 2 left and 7 down. What are the new coordinates of P?

- [ ] A) (-8, -4)
- [ ] B) (-8, 10)
- [ ] C) (-4, 10)
- [ ] D) (-4, -4)
- [ ] E) (-13, 1)

---

55 Three corners of a rectangle are at (-5, -1), (2, -1) and (2, 5). What are the coordinates of the fourth corner?

- [ ] A) (-5, 6)
- [ ] B) (-5, 5)
- [ ] C) (5, -5)
- [ ] D) (-5, -7)
- [ ] E) (9, 5)

---

56 What are the coordinates of the midpoint of the line joining (-1, 0) and (-3, 10)?

- [ ] A) (1, 5)
- [ ] B) (-2, 10)
- [ ] C) (-2, 5)
- [ ] D) (-4, 10)
- [ ] E) (5, -2)

---

57 The point A is at (-1, 7). A is reflected in the y-axis. What are the new coordinates of A?

- [ ] A) (-1, -7)
- [ ] B) (1, -7)
- [ ] C) (2, 7)
- [ ] D) (7, -1)
- [ ] E) (1, 7)

© Revision Library | revisionlibrary.co.uk

58 Three corners of a rectangle are at (3, -4), (3, 0) and (-4, 0). What are the coordinates of the fourth corner?

- ☐ A) (-3, -4)
- ☐ B) (10, -4)
- ☐ C) (-4, 4)
- ☐ D) (-4, -4)
- ☐ E) (-4, -3)

---

59 What are the coordinates of the midpoint of the line joining (7, 6) and (5, 6)?

- ☐ A) (12, 12)
- ☐ B) (-2, 0)
- ☐ C) (6, 6)
- ☐ D) (7, 6)
- ☐ E) (1, 0)

---

60 What are the coordinates of the midpoint of the line joining (0, 3) and (2, 1)?

- ☐ A) (2, 4)
- ☐ B) (1, 2)
- ☐ C) (2, 1)
- ☐ D) (2, 2)
- ☐ E) (1, 1)

---

61 The point P is at (-6, 1). P is translated 1 left and 1 up. What are the new coordinates of P?

- ☐ A) (-7, 2)
- ☐ B) (-5, 0)
- ☐ C) (-5, 2)
- ☐ D) (-7, 0)
- ☐ E) (-1, 1)

© Revision Library | revisionlibrary.co.uk

62 Three corners of a rectangle are at (-3, -1), (-3, -4) and (1, -4). What are the coordinates of the fourth corner?

- [ ] A) (-1, 1)
- [ ] B) (1, -7)
- [ ] C) (-7, -1)
- [ ] D) (1, -1)
- [ ] E) (1, 0)

---

63 What are the coordinates of the midpoint of the line joining (0, 8) and (-6, 4)?

- [ ] A) (-6, 12)
- [ ] B) (-6, -4)
- [ ] C) (3, 2)
- [ ] D) (-2, 6)
- [ ] E) (-3, 6)

---

64 The point P is at (-2, 8). P is translated 7 right and 2 up. What are the new coordinates of P?

- [ ] A) (-9, 6)
- [ ] B) (5, 10)
- [ ] C) (5, 6)
- [ ] D) (-9, 10)
- [ ] E) (0, 15)

---

65 Three corners of a rectangle are at (3, -2), (3, 0) and (0, 0). What are the coordinates of the fourth corner?

- [ ] A) (6, -2)
- [ ] B) (0, 2)
- [ ] C) (-2, 0)
- [ ] D) (1, -2)
- [ ] E) (0, -2)

© Revision Library | revisionlibrary.co.uk

66 What are the coordinates of the midpoint of the line joining (-5, 8) and (-9, -2)?

- ☐ A) (-4, -10)
- ☐ B) (-14, 6)
- ☐ C) (-7, 3)
- ☐ D) (2, 5)
- ☐ E) (-6, 3)

---

67 The point A is at (5, -4). A is reflected in the y-axis. What are the new coordinates of A?

- ☐ A) (5, 4)
- ☐ B) (-4, 5)
- ☐ C) (-4, -4)
- ☐ D) (-5, -4)
- ☐ E) (-5, 4)

---

68 The point A is at (-1, 2). A is reflected in y = 1. What are the new coordinates of A?

- ☐ A) (1, 2)
- ☐ B) (2, -1)
- ☐ C) (-1, -2)
- ☐ D) (1, -2)
- ☐ E) (-1, 0)

---

69 The point P is at (3, 8). P is translated 4 left and 1 up. What are the new coordinates of P?

- ☐ A) (-4, 1)
- ☐ B) (7, 9)
- ☐ C) (4, 4)
- ☐ D) (-1, 9)
- ☐ E) (7, 7)

© Revision Library | revisionlibrary.co.uk

70 Three corners of a rectangle are at (6, -5), (6, 0) and (1, 0). What are the coordinates of the fourth corner?

- [ ] A) (1, -5)
- [ ] B) (2, -5)
- [ ] C) (-5, 1)
- [ ] D) (1, 5)
- [ ] E) (11, -5)

---

71 The point P is at (2, -5). P is translated 4 left and 5 up. What are the new coordinates of P?

- [ ] A) (6, -10)
- [ ] B) (7, -9)
- [ ] C) (-2, 0)
- [ ] D) (6, 0)
- [ ] E) (-4, 5)

---

72 Three corners of a rectangle are at (6, 3), (-1, 3) and (-1, 1). What are the coordinates of the fourth corner?

- [ ] A) (1, 6)
- [ ] B) (6, 1)
- [ ] C) (6, 2)
- [ ] D) (-8, 1)
- [ ] E) (6, 5)

---

73 What are the coordinates of the midpoint of the line joining (-1, 8) and (-9, 12)?

- [ ] A) (10, -5)
- [ ] B) (-4, 10)
- [ ] C) (4, 2)
- [ ] D) (-10, 20)
- [ ] E) (-5, 10)

© Revision Library | revisionlibrary.co.uk

74 The point P is at (2, -3). P is translated 6 right and 7 down. What are the new coordinates of P?

- [ ] A) (-4, 4)
- [ ] B) (-4, -10)
- [ ] C) (-5, 3)
- [ ] D) (8, -10)
- [ ] E) (8, 4)

---

75 Three corners of a rectangle are at (0, 0), (0, -5) and (3, -5). What are the coordinates of the fourth corner?

- [ ] A) (4, 0)
- [ ] B) (3, -10)
- [ ] C) (3, 0)
- [ ] D) (-3, 0)
- [ ] E) (0, 3)

---

76 What are the coordinates of the midpoint of the line joining (-8, 6) and (-8, 12)?

- [ ] A) (-7, 9)
- [ ] B) (-8, 9)
- [ ] C) (0, 3)
- [ ] D) (9, -8)
- [ ] E) (-16, 18)

---

77 The point P is at (5, -3). P is translated 3 right and 3 up. What are the new coordinates of P?

- [ ] A) (8, 0)
- [ ] B) (2, -6)
- [ ] C) (8, -6)
- [ ] D) (3, 3)
- [ ] E) (2, 0)

© Revision Library | revisionlibrary.co.uk

78 Three corners of a rectangle are at (8, 1), (8, 3) and (1, 3). What are the coordinates of the fourth corner?

- [ ] A) (2, 1)
- [ ] B) (1, 5)
- [ ] C) (1, 2)
- [ ] D) (15, 1)
- [ ] E) (1, 1)

---

79 What are the coordinates of the midpoint of the line joining (-2, -8) and (-8, 0)?

- [ ] A) (-6, 8)
- [ ] B) (-10, -8)
- [ ] C) (-4, -4)
- [ ] D) (-5, -4)
- [ ] E) (3, 4)

---

80 The point A is at (0, -7). A is reflected in x = 1. What are the new coordinates of A?

- [ ] A) (3, -7)
- [ ] B) (-7, 0)
- [ ] C) (0, 7)
- [ ] D) (0, -7)
- [ ] E) (2, -7)

---

81 The point P is at (2, -3). P is translated 7 left and 4 up. What are the new coordinates of P?

- [ ] A) (-5, 1)
- [ ] B) (9, -7)
- [ ] C) (9, 1)
- [ ] D) (-5, -7)
- [ ] E) (6, -10)

© Revision Library | revisionlibrary.co.uk

82 Three corners of a rectangle are at (-4, 4), (-4, 0) and (1, 0). What are the coordinates of the fourth corner?

- ☐ A) (2, 4)
- ☐ B) (1, 5)
- ☐ C) (1, 4)
- ☐ D) (-9, 4)
- ☐ E) (1, -4)

---

83 What are the coordinates of the midpoint of the line joining (-2, -8) and (8, -14)?

- ☐ A) (5, 3)
- ☐ B) (3, -11)
- ☐ C) (6, -22)
- ☐ D) (-11, 3)
- ☐ E) (4, -11)

---

84 The point P is at (6, -1). P is translated 6 left and 7 down. What are the new coordinates of P?

- ☐ A) (12, 6)
- ☐ B) (0, -8)
- ☐ C) (12, -8)
- ☐ D) (0, 6)
- ☐ E) (-1, -7)

---

85 Three corners of a rectangle are at (3, 3), (3, 1) and (7, 1). What are the coordinates of the fourth corner?

- ☐ A) (7, 3)
- ☐ B) (7, 4)
- ☐ C) (-1, 3)
- ☐ D) (7, -1)
- ☐ E) (8, 3)

© Revision Library | revisionlibrary.co.uk

86 What are the coordinates of the midpoint of the line joining (2, -8) and (10, -14)?

- ☐ A) (12, -22)
- ☐ B) (-11, 6)
- ☐ C) (7, -11)
- ☐ D) (4, 3)
- ☐ E) (6, -11)

---

87 The point P is at (0, -2). P is translated 3 left and 4 down. What are the new coordinates of P?

- ☐ A) (-4, -5)
- ☐ B) (-3, 2)
- ☐ C) (3, -6)
- ☐ D) (3, 2)
- ☐ E) (-3, -6)

---

88 Three corners of a rectangle are at (3, 6), (3, 0) and (7, 0). What are the coordinates of the fourth corner?

- ☐ A) (8, 6)
- ☐ B) (-1, 6)
- ☐ C) (7, -6)
- ☐ D) (7, 6)
- ☐ E) (6, 7)

---

89 The point A is at (-5, 2). A is reflected in y = 1. What are the new coordinates of A?

- ☐ A) (5, -2)
- ☐ B) (-5, 0)
- ☐ C) (2, -5)
- ☐ D) (5, 2)
- ☐ E) (6, -2)

© Revision Library | revisionlibrary.co.uk

90 The point P is at (8, -5). P is translated 1 right and 3 up. What are the new coordinates of P?

- [ ] A) (9, -8)
- [ ] B) (7, -2)
- [ ] C) (9, -2)
- [ ] D) (11, -4)
- [ ] E) (7, -8)

---

91 Three corners of a rectangle are at (-1, 6), (-1, 0) and (3, 0). What are the coordinates of the fourth corner?

- [ ] A) (3, 6)
- [ ] B) (-5, 6)
- [ ] C) (3, -6)
- [ ] D) (6, 3)
- [ ] E) (3, 7)

---

92 What are the coordinates of the midpoint of the line joining (-8, 3) and (-4, 13)?

- [ ] A) (-5, 8)
- [ ] B) (-6, 8)
- [ ] C) (-12, 16)
- [ ] D) (2, 5)
- [ ] E) (4, 10)

---

93 The point A is at (-4, -4). A is reflected in the y-axis. What are the new coordinates of A?

- [ ] A) (4, 4)
- [ ] B) (5, -4)
- [ ] C) (-4, -4)
- [ ] D) (-4, 4)
- [ ] E) (4, -4)

© Revision Library | revisionlibrary.co.uk

94 The point P is at (6, -6). P is translated 4 right and 7 up. What are the new coordinates of P?

- ☐ A) (13, -2)
- ☐ B) (4, 7)
- ☐ C) (10, -13)
- ☐ D) (10, 1)
- ☐ E) (2, -13)

---

95 Three corners of a rectangle are at (-1, 2), (4, 2) and (4, 8). What are the coordinates of the fourth corner?

- ☐ A) (-1, 9)
- ☐ B) (0, 8)
- ☐ C) (-1, 8)
- ☐ D) (9, 8)
- ☐ E) (-1, -4)

---

96 What are the coordinates of the midpoint of the line joining (3, -8) and (-1, -12)?

- ☐ A) (2, -20)
- ☐ B) (2, -10)
- ☐ C) (2, 2)
- ☐ D) (1, -10)
- ☐ E) (-4, -4)

---

97 The point A is at (-6, -3). A is reflected in y = 1. What are the new coordinates of A?

- ☐ A) (6, -3)
- ☐ B) (-3, -6)
- ☐ C) (-6, 5)
- ☐ D) (6, 3)
- ☐ E) (-6, 3)

© Revision Library | revisionlibrary.co.uk

98 The point P is at (5, 0). P is translated 1 right and 2 up. What are the new coordinates of P?

- ☐ A) (6, 2)
- ☐ B) (4, 2)
- ☐ C) (6, -2)
- ☐ D) (7, 1)
- ☐ E) (4, -2)

---

99 Three corners of a rectangle are at (1, 1), (1, 6) and (-5, 6). What are the coordinates of the fourth corner?

- ☐ A) (-5, 2)
- ☐ B) (7, 1)
- ☐ C) (1, -5)
- ☐ D) (-5, 11)
- ☐ E) (-5, 1)

---

100 What are the coordinates of the midpoint of the line joining (6, -2) and (6, -10)?

- ☐ A) (0, 4)
- ☐ B) (6, -6)
- ☐ C) (0, -8)
- ☐ D) (12, -12)
- ☐ E) (-6, 6)

---

101 The point A is at (-7, -6). A is reflected in y = 1. What are the new coordinates of A?

- ☐ A) (8, 6)
- ☐ B) (7, -6)
- ☐ C) (-7, 8)
- ☐ D) (7, 6)
- ☐ E) (-6, -7)

© Revision Library | revisionlibrary.co.uk

102 The point P is at (-2, -2). P is translated 2 right and 4 up. What are the new coordinates of P?

- ☐ A) (-4, -6)
- ☐ B) (-4, 2)
- ☐ C) (2, 4)
- ☐ D) (0, 2)
- ☐ E) (2, 0)

---

103 What are the coordinates of the midpoint of the line joining (-3, 1) and (5, -1)?

- ☐ A) (0, 1)
- ☐ B) (1, 0)
- ☐ C) (8, -2)
- ☐ D) (2, 0)
- ☐ E) (4, 1)

---

104 The point A is at (7, 0). A is reflected in x = 2. What are the new coordinates of A?

- ☐ A) (0, 7)
- ☐ B) (-2, 0)
- ☐ C) (-7, 0)
- ☐ D) (7, 0)
- ☐ E) (-3, 0)

---

105 Translate point E(1, -3) by the vector (4, 5). Give the coordinates of the image.

(1)

---

106 The point P is at (-4, -6). P is translated 1 left and 3 up. What are the new coordinates of P?

- ☐ A) (-5, -9)
- ☐ B) (-3, -3)
- ☐ C) (-1, -7)
- ☐ D) (-3, -9)
- ☐ E) (-5, -3)

© Revision Library | revisionlibrary.co.uk

107 Three corners of a rectangle are at (-2, 7), (-2, 2) and (0, 2). What are the coordinates of the fourth corner?

- ☐ A) (7, 0)
- ☐ B) (0, 7)
- ☐ C) (0, -3)
- ☐ D) (-4, 7)
- ☐ E) (1, 7)

---

108 What are the coordinates of the midpoint of the line joining (-6, -2) and (-12, 2)?

- ☐ A) (-6, 4)
- ☐ B) (-18, 0)
- ☐ C) (-9, 0)
- ☐ D) (-8, 0)
- ☐ E) (3, 2)

---

109 The point A is at (3, 3). A is reflected in y = -3. What are the new coordinates of A?

- ☐ A) (3, -3)
- ☐ B) (-2, -3)
- ☐ C) (3, 3)
- ☐ D) (3, -9)
- ☐ E) (-3, -3)

---

110 Three corners of a rectangle are at (5, 7), (-1, 7) and (-1, 2). What are the coordinates of the fourth corner?

- ☐ A) (5, 3)
- ☐ B) (5, 2)
- ☐ C) (6, 2)
- ☐ D) (-7, 2)
- ☐ E) (5, 12)

© Revision Library | revisionlibrary.co.uk

111 What are the coordinates of the midpoint of the line joining (1, 1) and (1, 5)?

- ☐ A) (0, 4)
- ☐ B) (0, 2)
- ☐ C) (1, 3)
- ☐ D) (3, 1)
- ☐ E) (2, 6)

---

112 The point A is at (3, 3). A is reflected in the x-axis. What are the new coordinates of A?

- ☐ A) (-3, 3)
- ☐ B) (3, 3)
- ☐ C) (-3, -3)
- ☐ D) (3, -3)
- ☐ E) (-2, 3)

---

113 Three corners of a rectangle are at (-2, -4), (3, -4) and (3, 0). What are the coordinates of the fourth corner?

- ☐ A) (-2, 0)
- ☐ B) (0, -2)
- ☐ C) (8, 0)
- ☐ D) (-2, -8)
- ☐ E) (-1, 0)

---

114 What are the coordinates of the midpoint of the line joining (-5, 2) and (-7, 0)?

- ☐ A) (-12, 2)
- ☐ B) (1, -6)
- ☐ C) (-5, 1)
- ☐ D) (-6, 1)
- ☐ E) (1, 1)

© Revision Library | revisionlibrary.co.uk

115 The point A is at (1, -6). A is reflected in the x-axis. What are the new coordinates of A?

- [ ] A) (-1, 6)
- [ ] B) (0, -6)
- [ ] C) (1, 6)
- [ ] D) (-6, 1)
- [ ] E) (-1, -6)

---

116 Three corners of a rectangle are at (-5, 3), (-5, -1) and (0, -1). What are the coordinates of the fourth corner?

- [ ] A) (0, 3)
- [ ] B) (0, 4)
- [ ] C) (0, -5)
- [ ] D) (3, 0)
- [ ] E) (-10, 3)

---

117 What are the coordinates of the midpoint of the line joining (6, 4) and (2, -6)?

- [ ] A) (8, -2)
- [ ] B) (-4, -10)
- [ ] C) (5, -1)
- [ ] D) (2, 5)
- [ ] E) (4, -1)

---

118 The point A is at (-1, -7). A is reflected in y = 1. What are the new coordinates of A?

- [ ] A) (-7, -1)
- [ ] B) (2, 7)
- [ ] C) (-1, 9)
- [ ] D) (-1, 7)
- [ ] E) (1, 7)

© Revision Library | revisionlibrary.co.uk

119 The point P is at (-1, -1). P is translated 5 right and 5 down. What are the new coordinates of P?

- [ ] A) (4, -6)
- [ ] B) (5, -5)
- [ ] C) (4, 4)
- [ ] D) (-6, -6)
- [ ] E) (-6, 4)

---

120 Three corners of a rectangle are at (3, 0), (3, 5) and (-2, 5). What are the coordinates of the fourth corner?

- [ ] A) (8, 0)
- [ ] B) (0, -2)
- [ ] C) (-1, 0)
- [ ] D) (-2, 10)
- [ ] E) (-2, 0)

---

121 What are the coordinates of the midpoint of the line joining (2, -1) and (-4, -11)?

- [ ] A) (3, 5)
- [ ] B) (-1, -6)
- [ ] C) (-6, -1)
- [ ] D) (0, -6)
- [ ] E) (-2, -12)

---

122 The point A is at (7, 1). A is reflected in $x = 0$. What are the new coordinates of A?

- [ ] A) (-6, 1)
- [ ] B) (7, -1)
- [ ] C) (1, 7)
- [ ] D) (-7, 1)
- [ ] E) (-7, -1)

© Revision Library | revisionlibrary.co.uk

123 Three corners of a rectangle are at (-3, 2), (0, 2) and (0, 4). What are the coordinates of the fourth corner?

- ☐ A) (-3, 4)
- ☐ B) (3, 4)
- ☐ C) (-3, 5)
- ☐ D) (-3, 0)
- ☐ E) (-2, 4)

---

124 What are the coordinates of the midpoint of the line joining (-4, 5) and (2, 7)?

- ☐ A) (6, 2)
- ☐ B) (6, -1)
- ☐ C) (-1, 6)
- ☐ D) (-2, 12)
- ☐ E) (3, 1)

---

125 The point A is at (-2, -1). A is reflected in y = 2. What are the new coordinates of A?

- ☐ A) (3, 1)
- ☐ B) (-2, 5)
- ☐ C) (2, 1)
- ☐ D) (-1, -2)
- ☐ E) (-2, 1)

© Revision Library | revisionlibrary.co.uk

126 Three corners of a rectangle are at (-4, -4), (1, -4) and (1, -1). What are the coordinates of the fourth corner?

- [ ] A) (-3, -1)
- [ ] B) (-4, -7)
- [ ] C) (6, -1)
- [ ] D) (-4, 0)
- [ ] E) (-4, -1)

---

127 What are the coordinates of the midpoint of the line joining (-1, -7) and (9, 3)?

- [ ] A) (4, -2)
- [ ] B) (5, -2)
- [ ] C) (-2, 4)
- [ ] D) (5, 5)
- [ ] E) (8, -4)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 2.95 Coordinates, Reflection and Translation: 2-hour Pack

Question 1

correct option D ((3, 2)) cao **B1**

Answer: D) (3, 2)

Question 2

correct option C ((-3, -1)) cao **B1**

Answer: C) (-3, -1)

Question 3

correct option B ((5, -1)) cao **B1**

Answer: B) (5, -1)

Question 4

correct option E ((3, -2)) cao **B1**

Answer: E) (3, -2)

Question 5

correct option A ((-7, 12)) cao **B1**

Answer: A) (-7, 12)

Question 6

correct option D ((3, 2)) cao **B1**

Answer: D) (3, 2)

Question 7

correct option C ((-5, 6)) cao **B1**

Answer: C) (-5, 6)

Question 8

correct option E ((9, 3)) cao **B1**

Answer: E) (9, 3)

Question 9

correct option D ((7, 0)) cao **B1**

Answer: D) (7, 0)

Question 10

correct option B ((6, 0)) cao **B1**

Answer: B) (6, 0)

Question 11

correct option C ((-2, 2)) cao **B1**

Answer: C) (-2, 2)

Question 12

correct option A ((-7, -6)) cao **B1**

Answer: A) (-7, -6)

Question 13

correct option C ((0, 2)) cao **B1**

Answer: C) (0, 2)

Question 14

correct option A ((-2, 12)) cao **B1**

Answer: A) (-2, 12)

Question 15

correct option D ((-2, 2)) cao **B1**

Answer: D) (-2, 2)

Question 16

correct option E ((3, 8)) cao **B1**

Answer: E) (3, 8)

Question 17

correct option C ((-7, -7)) cao **B1**

Answer: C) (-7, -7)

Question 18

correct option D ((-3, -1)) cao **B1**

Answer: D) (-3, -1)

Question 19

correct option C ((-4, -3)) cao **B1**

Answer: C) (-4, -3)

Question 20

correct option E ((-7, 1)) cao **B1**

Answer: E) (-7, 1)

Question 21

correct option B ((-1, 3)) cao **B1**

Answer: B) (-1, 3)

Question 22

correct option E ((-5, 7)) cao **B1**

Answer: E) (-5, 7)

Question 23

correct option D ((-3, 1)) cao **B1**

Answer: D) (-3, 1)

Question 24

correct option C ((2, 0)) cao **B1**

Answer: C) (2, 0)

Question 25

correct option A ((2, -1)) cao **B1**

Answer: A) (2, -1)

Question 26

correct option E ((-2, -4)) cao **B1**

Answer: E) (-2, -4)

Question 27

correct option B ((-9, 1)) cao **B1**

Answer: B) (-9, 1)

Question 28

correct option D ((0, -3)) cao **B1**

Answer: D) (0, -3)

© Revision Library | revisionlibrary.co.uk

Question 29

correct option C ((0, -3)) cao **B1**

Answer: C) (0, -3)

Question 30

correct option E ((-1, -6)) cao **B1**

Answer: E) (-1, -6)

Question 31

correct option B ((8, 6)) cao **B1**

Answer: B) (8, 6)

Question 32

correct option D ((0, 14)) cao **B1**

Answer: D) (0, 14)

Question 33

correct option C ((-5, 6)) cao **B1**

Answer: C) (-5, 6)

Question 34

correct option A ((-1, -3)) cao **B1**

Answer: A) (-1, -3)

Question 35

correct option B ((0, 1)) cao **B1**

Answer: B) (0, 1)

Question 36

correct option A ((4, -1)) cao **B1**

Answer: A) (4, -1)

Question 37

correct option E ((1, 2)) cao **B1**

Answer: E) (1, 2)

Question 38

correct option B ((5, 9)) cao **B1**

Answer: B) (5, 9)

Question 39

correct option C ((-4, 0)) cao **B1**

Answer: C) (-4, 0)

Question 40

correct option D ((5, 2)) cao **B1**

Answer: D) (5, 2)

Question 41

correct option C ((-9, 5)) cao **B1**

Answer: C) (-9, 5)

Question 42

correct option B ((-6, -7)) cao **B1**

Answer: B) (-6, -7)

Question 43

correct option D ((7, 7)) cao **B1**

Answer: D) (7, 7)

Question 44

correct option E ((-5, 13)) cao **B1**

Answer: E) (-5, 13)

Question 45

correct option C ((6, 3)) cao **B1**

Answer: C) (6, 3)

Question 46

correct option A ((6, 1)) cao **B1**

Answer: A) (6, 1)

Question 47

correct option B ((1, 3)) cao **B1**

Answer: B) (1, 3)

Question 48

correct option D ((4, 4)) cao **B1**

Answer: D) (4, 4)

Question 49

correct option E ((13, -4)) cao **B1**

Answer: E) (13, -4)

Question 50

correct option A ((2, -3)) cao **B1**

Answer: A) (2, -3)

Question 51

correct option B ((5, 6)) cao **B1**

Answer: B) (5, 6)

Question 52

correct option C ((6, -3)) cao **B1**

Answer: C) (6, -3)

Question 53

correct option D ((-3, 11)) cao **B1**

Answer: D) (-3, 11)

Question 54

correct option A ((-8, -4)) cao **B1**

Answer: A) (-8, -4)

Question 55

correct option B ((-5, 5)) cao **B1**

Answer: B) (-5, 5)

Question 56

correct option C ((-2, 5)) cao **B1**

Answer: C) (-2, 5)

Question 57

correct option E ((1, 7)) cao **B1**

Answer: E) (1, 7)

Question 58

correct option D ((-4, -4)) cao **B1**

Answer: D) (-4, -4)

© Revision Library | revisionlibrary.co.uk

Question 59

correct option C ((6, 6)) cao **B1**

Answer: C) (6, 6)

Question 60

correct option B ((1, 2)) cao **B1**

Answer: B) (1, 2)

Question 61

correct option A ((-7, 2)) cao **B1**

Answer: A) (-7, 2)

Question 62

correct option D ((1, -1)) cao **B1**

Answer: D) (1, -1)

Question 63

correct option E ((-3, 6)) cao **B1**

Answer: E) (-3, 6)

Question 64

correct option B ((5, 10)) cao **B1**

Answer: B) (5, 10)

Question 65

correct option E ((0, -2)) cao **B1**

Answer: E) (0, -2)

Question 66

correct option C ((-7, 3)) cao **B1**

Answer: C) (-7, 3)

Question 67

correct option D ((-5, -4)) cao **B1**

Answer: D) (-5, -4)

Question 68

correct option E ((-1, 0)) cao **B1**

Answer: E) (-1, 0)

Question 69

correct option D ((-1, 9)) cao **B1**

Answer: D) (-1, 9)

Question 70

correct option A ((1, -5)) cao **B1**

Answer: A) (1, -5)

Question 71

correct option C ((-2, 0)) cao **B1**

Answer: C) (-2, 0)

Question 72

correct option B ((6, 1)) cao **B1**

Answer: B) (6, 1)

Question 73

correct option E ((-5, 10)) cao **B1**

Answer: E) (-5, 10)

Question 74

correct option D ((8, -10)) cao **B1**

Answer: D) (8, -10)

Question 75

correct option C ((3, 0)) cao **B1**

Answer: C) (3, 0)

Question 76

correct option B ((-8, 9)) cao **B1**

Answer: B) (-8, 9)

Question 77

correct option A ((8, 0)) cao **B1**

Answer: A) (8, 0)

Question 78

correct option E ((1, 1)) cao **B1**

Answer: E) (1, 1)

Question 79

correct option D ((-5, -4)) cao **B1**

Answer: D) (-5, -4)

Question 80

correct option E ((2, -7)) cao **B1**

Answer: E) (2, -7)

Question 81

correct option A ((-5, 1)) cao **B1**

Answer: A) (-5, 1)

Question 82

correct option C ((1, 4)) cao **B1**

Answer: C) (1, 4)

Question 83

correct option B ((3, -11)) cao **B1**

Answer: B) (3, -11)

Question 84

correct option B ((0, -8)) cao **B1**

Answer: B) (0, -8)

Question 85

correct option A ((7, 3)) cao **B1**

Answer: A) (7, 3)

Question 86

correct option E ((6, -11)) cao **B1**

Answer: E) (6, -11)

Question 87

correct option E ((-3, -6)) cao **B1**

Answer: E) (-3, -6)

Question 88

correct option D ((7, 6)) cao **B1**

Answer: D) (7, 6)

© Revision Library | revisionlibrary.co.uk

Question 89

correct option B ((-5, 0)) cao **B1**

Answer: B) (-5, 0)

Question 90

correct option C ((9, -2)) cao **B1**

Answer: C) (9, -2)

Question 91

correct option A ((3, 6)) cao **B1**

Answer: A) (3, 6)

Question 92

correct option B ((-6, 8)) cao **B1**

Answer: B) (-6, 8)

Question 93

correct option E ((4, -4)) cao **B1**

Answer: E) (4, -4)

Question 94

correct option D ((10, 1)) cao **B1**

Answer: D) (10, 1)

Question 95

correct option C ((-1, 8)) cao **B1**

Answer: C) (-1, 8)

Question 96

correct option D ((1, -10)) cao **B1**

Answer: D) (1, -10)

Question 97

correct option C ((-6, 5)) cao **B1**

Answer: C) (-6, 5)

Question 98

correct option A ((6, 2)) cao **B1**

Answer: A) (6, 2)

Question 99

correct option E ((-5, 1)) cao **B1**

Answer: E) (-5, 1)

Question 100

correct option B ((6, -6)) cao **B1**

Answer: B) (6, -6)

Question 101

correct option C ((-7, 8)) cao **B1**

Answer: C) (-7, 8)

Question 102

correct option D ((0, 2)) cao **B1**

Answer: D) (0, 2)

Question 103

correct option B ((1, 0)) cao **B1**

Answer: B) (1, 0)

Question 104

correct option E ((-3, 0)) cao **B1**

Answer: E) (-3, 0)

Question 105

(5, 2) cao **B1**

Answer: (5, 2). Work: (1 + 4, -3 + 5) = (5, 2).

Question 106

correct option E ((-5, -3)) cao **B1**

Answer: E) (-5, -3)

Question 107

correct option B ((0, 7)) cao **B1**

Answer: B) (0, 7)

Question 108

correct option C ((-9, 0)) cao **B1**

Answer: C) (-9, 0)

Question 109

correct option D ((3, -9)) cao **B1**

Answer: D) (3, -9)

Question 110

correct option B ((5, 2)) cao **B1**

Answer: B) (5, 2)

Question 111

correct option C ((1, 3)) cao **B1**

Answer: C) (1, 3)

Question 112

correct option D ((3, -3)) cao **B1**

Answer: D) (3, -3)

Question 113

correct option A ((-2, 0)) cao **B1**

Answer: A) (-2, 0)

Question 114

correct option D ((-6, 1)) cao **B1**

Answer: D) (-6, 1)

Question 115

correct option C ((1, 6)) cao **B1**

Answer: C) (1, 6)

Question 116

correct option A ((0, 3)) cao **B1**

Answer: A) (0, 3)

Question 117

correct option E ((4, -1)) cao **B1**

Answer: E) (4, -1)

Question 118

correct option C ((-1, 9)) cao **B1**

Answer: C) (-1, 9)

© Revision Library | revisionlibrary.co.uk

Question 119

correct option A ((4, -6)) cao **B1**

Answer: A) (4, -6)

Question 120

correct option E ((-2, 0)) cao **B1**

Answer: E) (-2, 0)

Question 121

correct option B ((-1, -6)) cao **B1**

Answer: B) (-1, -6)

Question 122

correct option D ((-7, 1)) cao **B1**

Answer: D) (-7, 1)

Question 123

correct option A ((-3, 4)) cao **B1**

Answer: A) (-3, 4)

Question 124

correct option C ((-1, 6)) cao **B1**

Answer: C) (-1, 6)

Question 125

correct option B ((-2, 5)) cao **B1**

Answer: B) (-2, 5)

Question 126

correct option E ((-4, -1)) cao **B1**

Answer: E) (-4, -1)

Question 127

correct option A ((4, -2)) cao **B1**

Answer: A) (4, -2)

© Revision Library | revisionlibrary.co.uk