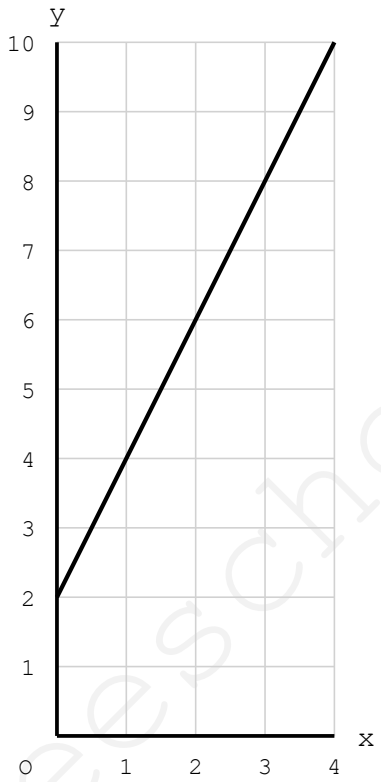
Coordinates & Graphs: Hard Practice Paper 2

Q1. What is the equation of the line drawn on this grid?



A. y = x + 2

B. y = 2x

C. y = 2x + 2

D. y = 2x + 4

E. y = 4x + 2

Q2. A straight line passes through (1, 3) and (4, 12). How many squares does it climb for each square it moves to the right?

A. 2 B. 3 C. 4 D. 6 E. 9

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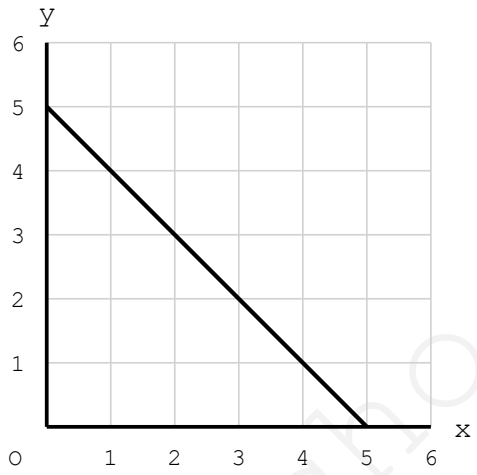
Q3. Where do the lines $y = 3x - 2$ and $y = x + 4$ cross?

A. (2, 4) B. (4, 8) C. (3, 6) D. (2, 6) E. (3, 7)

Q4. What is the equation of the line drawn on this grid?



A. $y = x + 5$

B. $y = 5x$

C. $y = x - 5$

D. $y = 5 - x$

E. $y = 5 + 2x$

Q5. A line is parallel to $y = 4x - 1$ and passes through the point (2, 9). What is its equation?

A. $y = 4x + 1$

B. $y = 4x - 1$

C. $y = 4x + 9$

D. $y = 2x + 9$

E. $y = 9x + 4$

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Q6. A straight line crosses the y-axis at (0, 6) and the x-axis at (3, 0). What is its equation?

A. $y = 6 - x$

B. $y = 3 - 2x$

C. $y = 2x + 6$

D. $y = 6x - 3$

E. $y = 6 - 2x$

Q7. Which point lies on both the line $y = 2x$ and the line where the two coordinates add up to 9?

A. (2, 4) B. (4, 5) C. (4, 8) D. (3, 6) E. (6, 3)

Q8. Which of these lines is the steepest?

A. $y = 3x + 1$

B. $y = 2x + 7$

C. $y = x + 9$

D. $y = 10 - x$

E. $y = 5$

Q9. Does the point (20, 41) lie on the line $y = 2x + 1$?

A. Yes, because $2 \times 20 + 1 = 41$

B. No, because 41 is odd

C. No, because $20 + 1 = 21$

D. Yes, because $41 - 20 = 21$

E. No, because the line stops at $x = 10$

Q10. Where does the line $y = x + 4$ cross the x-axis?

A. (4, 0) B. (0, 4) C. (0, −4) D. (−4, 0) E. (−4, −4)

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Q11. This table follows one rule. Which equation fits it?

x	1	2	3	4
y	1	4	7	10

A. $y = x + 3$

B. $y = 3x$

C. $y = 3x - 2$

D. $y = 2x - 1$

E. $y = 4x - 3$

Q12. Which of these lines does NOT pass through the origin?

A. $y = 5x$

B. $y = x$

C. $y = 5x + 2$

D. $y = -3x$

E. $y = 0.5x$

Q13. The cost of hiring a boat is given by $C = 3h + 5$, where h is the number of hours. What does the 5 stand for?

A. The cost of each hour

B. The number of hours allowed

C. The cost of 5 hours

D. The total cost

E. A fixed charge before any hours are counted

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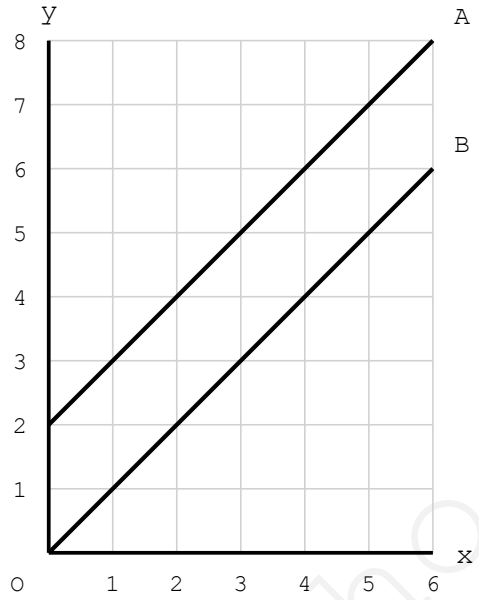
Q14. Two lines are drawn on the grid. Which statement is true?



A. They cross at (2, 2)

B. Line A is steeper than line B

C. They are parallel and never meet

D. Line B is steeper than line A

E. They cross on the y-axis

Q15. A line passes through (0, 1) and (4, 9). Which point also lies on it?

A. (2, 4) B. (2, 5) C. (6, 12) D. (8, 16) E. (3, 6)

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