

MATHS

Straight Lines Worksheet for MAH MCA CET 2025

For students preparing for MCA Entrance Exam.

- What is the value of k , are the lines $x + 2y - 9 = 0$ and $kx + 4y + 5 = 0$ parallel?
 - 2
 - 1
 - 1
 - 0
- Equation of the straight line making equal intercept on the axes and passing through the point $(2, 4)$ is
 - $4x - y - 4 = 0$
 - $2x + y - 8 = 0$
 - $x + y - 6 = 0$
 - $x + 2y - 10 = 0$
- Distance between the lines $5x + 3y - 7 = 0$ and $15x + 9y + 14 = 0$ is
 - $\frac{35}{\sqrt{34}}$
 - $\frac{1}{3\sqrt{34}}$
 - $\frac{35}{3\sqrt{34}}$
 - $\frac{35}{2\sqrt{34}}$
- The image of the point $(4, -3)$ with respect to the line $y = x$ is
 - $(-4, -3)$
 - $(3, 4)$
 - $(-4, 3)$
 - $(-3, 4)$
- What is the inclination of a line which is parallel to x -axis?
 - 0°
 - 180°
 - 45°
 - 90°
- What is the inclination of a line which is parallel to y -axis?
 - 0°
 - 180°
 - 45°
 - 90°
- For what value of m , the solution of $2x + 3y = 11$ and $2x - 4y = -24$ satisfies the equation $y = mx + 3$?
 - 2
 - 2
 - 1
 - 1
- The equations of line passing through $(-1, -2)$ and having a slope of $\frac{4}{7}$ is
 - $7y + 10 = 4x$
 - $Y = \frac{4}{7}x + \frac{10}{7}$
 - $x = \frac{4}{7}y + \frac{10}{7}$
 - $4x + 7y = 10$
- If $8x + 9y + 3 = 0$ and $Ax - 8y - 30 = 0$ are perpendicular, then find the value of A .
 - 9
 - 8
 - 6
 - None of the above
- $ax + 5y = 8$ has slope of $-4/3$. What is the value of a ?
 - $20/3$
 - $3/20$
 - $-20/3$
 - $-3/20$

11. The angle between the lines $x - 2y = y$ and $y - 2x = 5$ is
- $\tan^{-1}(1/4)$
 - $\tan^{-1}(3/5)$
 - $\tan^{-1}(5/4)$
 - $\tan^{-1}(2/3)$
12. The angle between the line $x + y = 3$ and the line joining the points $(1,1)$ and $(-3,4)$ is
- $\tan^{-1}(\frac{1}{7})$
 - $\tan^{-1}(\frac{1}{4})$
 - $\tan^{-1}(\frac{3}{7})$
 - None of these
13. The equation of line which is parallel to $x + 4y + 5 = 0$ and passes through $(1, 2)$ is
- $x + 4y + 9 = 0$
 - $x + 4y - 9 = 0$
 - $x + 2y + 9 = 0$
 - None of these
14. Find the distance of the point $(-1, 1)$ from the line $12(x + 6) = 5(y - 2)$.
- 10 Unit
 - 8 Unit
 - 5 Unit
 - 4 Unit
15. Find the distance between parallel line $15x + 8y - 34 = 0$ and $15x + 8y + 31 = 0$
- 15 unit
 - $15/2$ unit
 - 17 unit
 - $65/17$ unit
16. Find the equation of line drawn perpendicular to line $\frac{x}{4} + \frac{y}{6} = 1$ through the point, where it meet the y - axis.
- $x + 2y - 18 = 0$
 - $2x - 3y + 18 = 0$
 - $5x + y - 20 = 0$
 - $9x + 2y - 28 = 0$
17. Find equation of the line parallel to the line $3x - 4y + 2 = 0$ and passing through the point $(-2, 3)$.
- $3x - 4y - 18 = 0$
 - $5x + 3y - 10 = 0$
 - $2x + 6y - 19 = 0$
 - $4x + 9y - 10 = 0$
18. Find the angle between the lines $\sqrt{3}x + y = 1$ and $x + \sqrt{3}y = 1$
- 45°
 - 35°
 - 30°
 - 60°
19. Find equation of the line perpendicular to the line $x - 7y + 5 = 0$ and having x intercept 3.
- $5x + 3y - 10 = 0$
 - $7x - y - 21 = 0$
 - $2x - y - 22 = 0$
 - $x + 4y - 30 = 0$
20. Find the distance of the line $4x + 7y + 5 = 0$ from the point $(1, 2)$ along the line $2x - y = 0$.
- 18
 - $\frac{\sqrt{3}}{2}$
 - $23\sqrt{5}$
 - $\frac{23\sqrt{5}}{18}$

Answer Key

1. A	2. C	3. C	4. D	5. A	6. D	7. C	8. A	9. A	10. A
11. C	12. A	13. B	14. C	15. D	16. B	17. A	18. C	19. B	20. D

