Worksheet: Straight Lines

ICSE · Class 11 · Mathematics · 10 questions · 30 marks

Name: _____ Date: _____ Score: _____ / 30

Q1. Find the slope of the line passing through (2, 3) and (5, 9). *[2 marks]*

Q2. Write the equation of the line with slope 3 and y-intercept -2. *[2 marks]*

Q3. Show that the line through (1, 2) and (3, 6) is parallel to the line through (2, -1) and (4, 3). *[3 marks]*

Q4. Using slopes, check whether the points (1, 2), (3, 6), and (5, 10) are collinear. *[3 marks]*

Q5. Find the equation of the line through (-3, 5) with slope -2. *[3 marks]*

Q6. Find the equation of the line through (2, -3) and (-4, 5). *[4 marks]*

Q7. Find the equation of the line with x-intercept 5 and y-intercept -3. *[3 marks]*

Q8. Find the perpendicular distance from the point (2, 3) to the line $3x - 4y + 5 = 0$. *[3 marks]*

Q9. Find the distance between the parallel lines $3x + 4y - 5 = 0$ and $3x + 4y + 10 = 0$. *[3 marks]*

Q10. Find the acute angle between two lines with slopes 2 and -3. *[4 marks]*