

WKF F3 Ch8 Coordinate Geometry of Straight Lines Assignment 5

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Grade 9 Mathematics Term 1 Assignment 5

Name: _____ (_____)

Date: _____

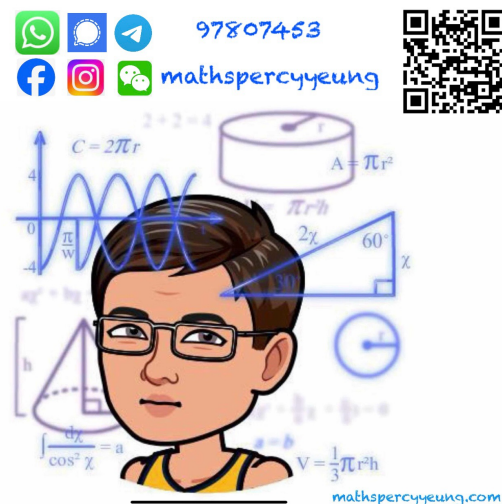
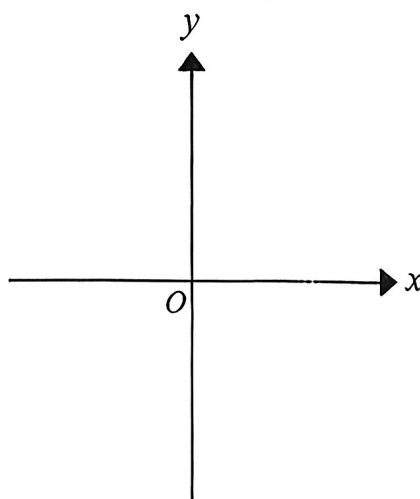
Class: _____

Grade: _____

Content: Ch.8 Coordinate Geometry of Straight Lines

1. On the rectangular coordinate plane, the straight line $L_1: 3x - y + 1 = 0$ has a

slope of 3. The coordinates of A are $\left(-\frac{2}{9}, \frac{1}{3}\right)$.



- (a) Does A lie on L_1 ? Explain your answer.
- (b) Denote the origin by O . Another straight line L_2 cuts the x -axis and y -axis at $C(2, 0)$ and B respectively. $L_1 \parallel L_2$.
- (i) Find the y -intercept of L_2 .
- (ii) D is the internal point of division of BC such that $BD:DC = 2:1$. Find the coordinates of D .
- (iii) Prove that A , O and D are collinear.
- (iv) Is AD perpendicular to L_2 ? Explain your answer.

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END OF ASSIGNMENT