

INTENSIVE MATHEMATICS (PBM1035)
Session December 2017
SELF-EXERCISE 14

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
 - Show your working. You may use a non-programmable scientific calculator.
1. Find the gradient of the line passing through the pairs of points.
 - (a) (2, 1), (4, 5)
 - (b) (-1, 0), (3, -5)
 2. Determine whether the graphs of each pair of equations are parallel, perpendicular, or neither.
 - (a) $y = 3x + 4$; $y = 3x + 7$
 - (b) $y = -4x + 1$; $4y = x + 3$
 - (c) $y = 2x - 5$; $y = 5x - 5$
 3. Write the equation of the line that is parallel to the graph of each equation and passes through the given point.
 - (a) $y = 3x + 6$; (4, 7)
 - (b) $y = x - 4$; (-2, 3)
 - (c) $y + 2x = 4$; (-1, 2)
 4. Write the equation of the line that is perpendicular to the graph of each equation and passes through the given point.
 - (a) $y = -4x - 2$; (4, -4)
 - (b) $y = 2x - 3$; (-5, 3)
 - (c) $y = -5x + 1$; (2, -1)