MATH1040 Practice questions 5

- 1. Answer each of the following questions, showing all working.
 - (a) Find the distance between the points (-3, -3) and (2, 1).
 - (b) Find the gradient and y-intercept of the line -y 3x 2 = -2
 - (c) Find the equation of the line with gradient m = 2 passing through the point (5, -5).
 - (d) Find the equation of the straight line passing through the points (0, -4) and (0, -1).
 - (e) Find the equation of the line parallel to 3y + x 1 = -1 and passing through the point (-1, -1).
 - (f) Find the equation of the line perpendicular to -3y + 2x 3 = -3 and passing through the point (4, -2).
- 2. Answer each of the following questions, showing all working.
 - (a) Find the distance between the points (3, -4) and (3, -3).
 - (b) Find the gradient and y-intercept of the line -3y 3x + 2 = -2
 - (c) Find the equation of the line with gradient m = 0 passing through the point (2, 0).
 - (d) Find the equation of the straight line passing through the points (2, 4) and (4, 0).
 - (e) Find the equation of the line parallel to 3x + 1 = 2 and passing through the point (3,0).
 - (f) Find the equation of the line perpendicular to -3y 3x 2 = -1 and passing through the point (5, -2).
- 3. Answer each of the following questions, showing all working.
 - (a) Find the distance between the points (-3, -2) and (3, 4).
 - (b) Find the gradient and y-intercept of the line 3x 2 = -3
 - (c) Find the equation of the line with gradient m = -4 passing through the point (0,3).
 - (d) Find the equation of the straight line passing through the points (3,3) and (-3,-1).
 - (e) Find the equation of the line parallel to 3y + 3 = 1 and passing through the point (-1, 4).
 - (f) Find the equation of the line perpendicular to 3x + 2 = -3 and passing through the point (0, -4).
- 4. Answer each of the following questions, showing all working.
 - (a) Find the distance between the points (1, -4) and (-3, -3).
 - (b) Find the gradient and y-intercept of the line -2y 3x = -2
 - (c) Find the equation of the line with gradient m = -2 passing through the point (-3, 3).
 - (d) Find the equation of the straight line passing through the points (1, -2) and (3, 0).
 - (e) Find the equation of the line parallel to -2y + 2x 2 = -1 and passing through the point (2, 4).
 - (f) Find the equation of the line perpendicular to -y 2 = 3 and passing through the point (0,3).
- 5. Answer each of the following questions, showing all working.
 - (a) Find the distance between the points (4, -3) and (-4, 3).
 - (b) Find the gradient and y-intercept of the line -2y 2x + 3 = 1
 - (c) Find the equation of the line with gradient m = 1 passing through the point (-1, -1).
 - (d) Find the equation of the straight line passing through the points (2,0) and (3,2).
 - (e) Find the equation of the line parallel to 2y 3x = 0 and passing through the point (-4, 4).
 - (f) Find the equation of the line perpendicular to x = -1 and passing through the point (-2, -4).