Hand In Assignment

Name: _____ **Total: _____/30**

Record answers on a separate sheet of paper.

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1. Calculate the distance between A(3, 7) and B(-1, -5). (1 mark)
2. A rectangle has vertices A(–4, 4), B(-4, -2), C(7, -2) and D(7, 4).

   a) Find the perimeter. (5 marks)

   b) Find the area. (2 marks)
3. Find the midpoint of C(-6, 2) and D(4, 8). (1 mark)
4. The midpoint of line segment XY is M(2, 2). If one endpoint is X(-2, -1), find the missing endpoint Y. (2 marks)
5. The points P(1, 4), Q(-1, -2), and R(4, -3) are given. Determine the coordinates of a point S so that RS is parallel to PQ and S is on the *x*-axis. (3 marks)

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Write an equation in standard form for each line: (2 marks each)

1. Passing through (3, 4); $m = \frac{2}{5}$
2. Passing through (–5, 1) and (1, –3)
3. $m = \frac{3}{4}$ and a *y*-intercept of –3
4. Passing through (–2, 1) and parallel to $4x - 3y - 7 = 0$
5. Write an equation of the line through (–2, 5) and parallel to the *y*-axis.

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Graph each line using the indicated method. (3 marks each)

7. $y = \frac{1}{2}x - 1$, using slope and *y*-intercept
8. $2x + 3y = 9$, using *x* and *y* intercepts