

Mathematics 10  
Class Assignment 4

1. Determine the midpoint of the line segment with endpoints (3, 8) and (-9, 20)
2. Determine the second endpoint of a line that has a midpoint of (5, -3) and an endpoint of (14, 6)
3. Determine the length of the line segment with endpoints (3, -4) and (7, 5)
4. Determine the slope of the line that passes through points (7, -4) and (9, 6)
5. Write a linear equation for the line that passes through point (-3, 4) and has a slope of 2.
6. Write a linear equation for the line that passes through points (2, 5) and (4, 9)
7. Write a linear that passes through point (3, 0) and is perpendicular to line  $y = -\frac{1}{2}x + 9$
8. Write a linear equation that passes through point (-4, 5) and is parallel to line  $y = 2x - 8$
9. Determine the radius of a circle with centre at (0, 0) which has point (6, -7) on its circumference. state your answer as an exact and as an approximate solution.
10. Determine the diameter of the circle with equation  $x^2 + y^2 = 81$