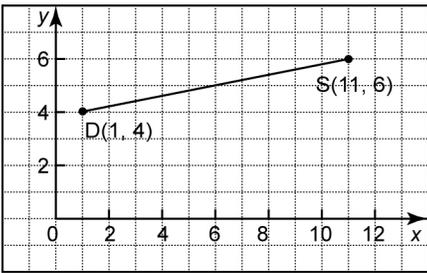


## Chapter 2 Test

- The midpoint of the line segment with endpoints A(-3, 5) and B(7, -1) is  
 A (2, 2)            B (-5, 3)  
 C (4, 4)            D (1, 3)
- The length of the line segment with endpoints C(-5, 2) and D(3, -1) is  
 A  $\sqrt{17}$             B  $\sqrt{13}$   
 C  $\sqrt{65}$             D  $\sqrt{73}$
- An equation for the circle with centre (0, 0) and radius 6 is  
 A  $x^2 + y^2 = 6$       B  $x^2 + y^2 = 9$   
 C  $x^2 + y^2 = 36$     D  $x^2 + y^2 = 12$
- The endpoints of a diameter of a circle are A(-4, 3) and B(2, -5). The coordinates of the centre of this circle are  
 A (-3, -4)          B (-1, -1)  
 C (3, 4)            D (-1, -3)
- The point (6, -3) lies on a circle with centre (0, 0). The equation of the circle is  
 A  $x^2 + y^2 = 45$     B  $x^2 + y^2 = 3$   
 C  $x^2 + y^2 = 9$      D  $x^2 + y^2 = 81$
- Find the midpoint and the length of the line segment defined by each pair of endpoints.
  - A(-5, 4) and B(3, -6)
  - C(-4, -3) and D(1, -2)
- Draw the triangle with vertices A(-5, -3), B(1, 5), and C(3, -1).
  - Determine an equation in slope  $y$ -intercept form for the median from B.
  - Determine an equation for the perpendicular bisector of AB.
- A computer store is located exactly halfway between David's house and his school. The intervals on the gridlines represent 1 km.
 



  - How far apart are David's house and his school, to the nearest tenth of a kilometre?
  - Determine the coordinates of the computer store.
- The vertices of a triangle are D(-4, 5), E(-7, -1), and F(-1, -1).
  - Determine the lengths of the sides of the triangle.
  - Classify  $\triangle DEF$ . Explain your reasoning.
  - Determine the perimeter of  $\triangle DEF$ . Round your answer to the nearest tenth of a unit.
  - Describe how you could use geometry software to verify your answers to parts a), b), and c).
- Plot the triangle with vertices X(-4, -3), Y(-2, 5), and Z(4, 1).
  - Determine an equation in slope  $y$ -intercept form for the median from vertex X.
  - Determine an equation for the right bisector of XY.
  - Determine an equation for the altitude from Y to XZ.