Expressing Geometric Properties Worksheet 1

- 1. Prove that the shape with corners A(4,7), B(8,5) and C(10,10) is a scalene triangle.
- 6. Prove that the shape with corners A(14,11), B(24,9), C(26,3) and D(16,5) is a parallelogram.
- 2. Prove that the shape with corners A(1,4), B(3,0), C(1,-4) and D(-1,0) is a rhombus.
- 7. Prove that the shape with corners A(8,9), B(13,10), C(14,5) and D(9,4) is a square.
- 3. Prove that the shape with corners A(10,8), B(12,7), C(9,6) and D(11,5) is a rectangle.
- 8. Prove that the point (4,11) lies in the line y = 0.5x + 9.
- 4. Prove that the shape with corners A(10,8), B(13,5,5) and C(17,12) is an isosceles triangle.
- 9. Prove that the point (6,8) lies on the circle with a center of (3,4) and a radius 5.
- 5. Prove that the shape with corners A(-6,4), B(-3,-1), C(0,-2) and D(-6,-8) is a trapezoid.
- 10. Prove that the point (6,8) lies on the ellipse $\frac{(x-1)^2}{9} + \frac{(y-2)^2}{16} = 1..$

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