Form and Solve Linear Equations for Problems Involving Area and Perimeter: Exercise 2

1. The area of the rectangle is 42 mm², find the value of y.

2. The area of the triangle is 24 cm², find the value of z.

3. The area of this rectangle is 48. Determine y.

4. The area of the triangle is 20 cm², find the value of a.

5. The area of the trapezium is 72 mm², find the value of b.

6. Given that the area of the rectangle is 12 cm², find its perimeter by first finding z.

7. The compound shape is made up of a rectangle and a parallelogram. It has an area of 100 cm².

8. The compound shape is made up of a semicircle and a rectangle. It has an area of 90π mm². Find the exact value of y.

9. [AQA IGCSE FM Jan2013-P2 Q5]
A parallelogram and a trapezium are shown. All lengths are in centimeters. The area of the parallelogram is equal to the area of the trapezium. Work out the value of x.

10. The two areas are equal. Find the value of each area.