

PART A

1. The length of a rectangle is 6 ft greater than the width. The perimeter is 40 ft. Find the length and the width. *13 ft; 7 ft.*
3. The length of a rectangle is 3 ft more than twice the width. The perimeter is 54 ft. Find the length and the width. *19 ft; 8 ft*
5. Side x of a triangle is 2 ft longer than side y . Side z is 5 ft shorter than twice side y . The perimeter is 49 ft. Find the length of each side.
7. The perimeter of a triangle is 38 in. The first side is 3 in. less than the second, and the third is 5 in. more than the second. Find the lengths of the three sides. *9 in.; 12 in.; 17 in.*
9. The base of an isosceles triangle is 8 in. The perimeter is 30 in. Find the lengths of the two congruent sides. *11 in.; 11 in.*

PART B

11. A square and an equilateral triangle have the same perimeter. Each side of the square is 12 ft. Find the length of each side of the triangle. *16 ft*
13. A rectangle and an equilateral triangle have the same perimeter. The length of the rectangle is twice the width. Each side of the triangle is 18 cm. Find the length and width of the rectangle. *18 cm; 9 cm*

PART C

15. The length of a rectangle is 3 in. less than twice the width. If the length is decreased by 2 in. and the width by 1 in., the perimeter will be 24 in. Find the dimensions of the original rectangle.

2. The length of a rectangle is twice the width. The perimeter is 42 cm. Find the length and the width. *14 cm; 7 cm*
4. The length of a rectangle is 2 ft less than 3 times the width. The perimeter is 68 yd. Find the length and the width. *76 ft; 26 ft*
6. The perimeter of a triangle is 40 ft. The first side is twice the second. The third side is 5 more than the first. Find the length of each side.
8. The perimeter of a triangle is 47 in. The first side is 5 in. less than twice the second, and the third is 2 in. more than the first. Find the lengths of the sides.
10. One of the two congruent sides of an isosceles triangle is 7 ft. The perimeter is 24 ft. Find the base. *10 ft 17 in.; 11 in.; 19 in.*
12. A square and an equilateral triangle have the same perimeter. Each side of the triangle is 20 cm. Find the length of each side of the square.
14. Each side of an equilateral triangle is 2 ft more than each side of a square. Their perimeters are the same. Find the length of each side of the triangle. *8 ft 15 cm*
16. A rectangular field is 4 times as long as it is wide. If the length is decreased by 10 m and the width is increased by 2 m, the perimeter will be 64 m. Find the dimensions of the original field.