

For the problems below, write the appropriate let statements and include a diagram. Write the equation and solve it. Write a meaningful conclusion.

1. The side of a square is $2x + 3$. If the perimeter is 96, what is x ? (10.5)
2. A rectangle's length is four times as long as its width. Its perimeter is 200cm . Find the length and the width of the rectangle. (80cm 20cm)
3. The length of a rectangle is 5m more than the width. If the perimeter is 70m, what is the width? (15m)
4. The width of a rectangular swimming pool is 8m less than the length. Find the dimensions of the pool if the perimeter is 104m. (22m,30m)

5. The length of a rectangle is 3 more than twice the width. If the perimeter is 42m, what is the width? (6m)

6. The length of a rectangular playground is 4 metres less than 3 times the width. The perimeter is 64 metres. What are the dimensions of the playground? (9m, 23m)

7. The base of an isosceles triangle is 22cm and its perimeter is 90cm. Find the length of each of the equal sides using an algebraic equation. Be sure to define your variables. (34 cm)

8. A rectangle has a length is 4 times the width, **after** it's been increased by 5. The perimeter is 70m. Find the value of the width and length. (3m, 32m)