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# Perimeter and Area of Rectangle

Top of Form

Worked-out problems on Perimeter and Area of Rectangle:

**1.** Find the perimeter and area of the rectangle of length 17 cm and breadth 13 cm.   
  
**Solution:**   
  
Given: length = 17 cm, breadth = 13 cm

Perimeter of rectangle = 2 (length + breadth)

                                    = 2 (17 + 13) cm

                                    = 2 × 30 cm

                                    = 60 cm

We know that the area of rectangle = length × breadth

                                                         = (17 × 13) cm2

                                                        = 221 cm2

**2.** Find the breadth of the rectangular plot of land whose area is 660 m2 and whose length is 33 m. Find its perimeter.   
  
**Solution:**   
  
We know that the breadth of the rectangular plot = Area / length

                                                                               = 660m2 / 33m

                                                                               = 20 m

Therefore, the perimeter of the rectangular plot = 2 (length + breadth)

                                                                             = 2(33 + 20) m

                                                                             = 2 × 53 m

                                                                             = 106 m

**3.** Find the area of the rectangle if its perimeter is 48 cm and its breadth is 6 cm.

**Solution:**   
  
P = 2 (l + b)

Here, P = 48 cm; b = 6 cm

Therefore, 48 = 2 (l + 6)

           ⇒ 48/2 = l + 6

           ⇒ 24 = l + 6

           ⇒ 24 - 6 = l

           ⇒ 18 = l

Therefore, length = 18 cm

Now, area of rectangle = l × b = 18 × 6 cm2 = 108 cm2

**4.** Find the breadth and perimeter of the rectangle if its area is 96 cm2  
 and the length is 12 cm.   
  
**Solution:**   
  
Given, A = 96 cm2 and l = 12 cm

A = l × b

Therefore, 96 = 12 × b

            ⇒ 96/12 = b

            ⇒ b = 8 cm

Now, P = 2 (l + b)

            = 2 (12 + 8)

            = 2 × 20

            = 40 cm