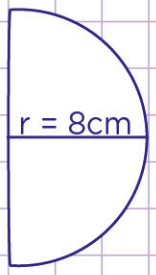
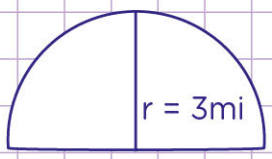
Name: ..... Class: .....

Semicircles: calculate area, perimeter, radius, and diameter

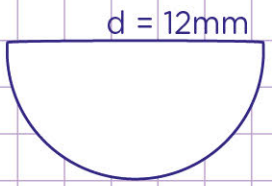
1. The radius of a semicircle is 8 cm. Find the perimeter of the semicircle. Use 3.14 for π



2. The radius of a semicircle is 3 miles. Find the area of the semicircle. Use 3.14 for π



3. The diameter of a semicircle is 12 mm. Find the radius of the semicircle. Use 3.14 for π



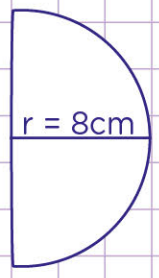
Solution

mathskills4kids

Name: ..... Class: .....

Semicircles: calculate area, perimeter, radius, and diameter

1. The radius of a semicircle is 8 cm. Find the perimeter of the semicircle. Use 3.14 for π



Let's set up the formula for the perimeter (P) of the semicircle.

$P = \frac{2\pi r}{2} + 2r$

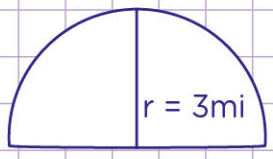
$P = \pi r + 2r$

$P = 3.14 \times 8cm + 2(8cm)$

$25.12 + 16 = 41.12$ cm

So the perimeter is 41 . 12 cm

2. The radius of a semicircle is 3 miles. Find the area of the semicircle. Use 3.14 for π



Let's set up the formula for the area of the semicircle.

$A = \frac{\pi r^2}{2}$

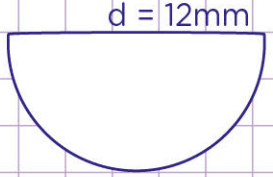
Subtitude r = 3 mi into the formula

3.14 x 3 mi x 3 mi / 2

28.26 mi /2 = 14.13 mi^2

So the area is 14.13 mi^2

3. The diameter of a semicircle is 12 mm. Find the radius of the semicircle. Use 3.14 for π



Let's set up the formula for the diameter of the semicircle.

Diameter = 2r

12 mm = 2r

r = 12 mm/2

r = 6 mm

So the radius is 6 mm