Area & Circumference of Circle

Find the area of each circle from the given circumference. (Use π = $\frac{22}{7}$ or 3.14)

1) Circumference = 34.54 cm

   Circumference = 2πr

   34.54 cm = 2 × 3.14 × r

   34.54 cm = 6.28 × r ; **r = 5.5 cm**

   Area = πr² = 3.14 × 5.5²

   = 3.14 × 30.25 = **94.985 cm²**

2) Circumference = 194.68 mm

   Area = _____

3) Circumference = 87.92 m

   Area = _____

4) Circumference = 16.328 mm

   Area = _____

5) Circumference = 43.96 cm

   Area = _____

6) Circumference = 40.82 m

   Area = _____

7) Circumference = 106.76 cm

   Area = _____

Find the circumference of each circle from the given area. (Use π = $\frac{22}{7}$ or 3.14)

1) Area = 113.04 m²

   Area = πr²

   113.04 m² = 3.14 × r²

   113.04 m² = r² ; **r = 6 m**

   Circumference = 2πr

   = 2 × 3.14 × 6 = **37.68 m**

2) Area = 490.625 mm²

   Circumference = _____

3) Area = 1256 cm²

   Circumference = _____

4) Area = 1017.36 cm²

   Circumference = _____

5) Area = 38.465 mm²

   Circumference = _____

6) Area = 701.5 m²

   Circumference = _____

7) Area = 162.7776 mm²

   Circumference = _____

Area & Circumference of Circle

Answer key

Find the area of each circle from the given circumference. (Use π = $\frac{22}{7}$ or 3.14)

1) Circumference = 34.54 cm

Circumference = 2πr

34.54 cm = 2 × 3.14 × r

34.54 cm = 6.28 × r ; **r = 5.5 cm**

Area = πr² = 3.14 × 5.5²

= 3.14 × 30.25 = **94.985 cm²**

2) Circumference = 194.68 mm

Area = _____ **3017.54 mm²**

3) Circumference = 87.92 m

Area = _____ **615.44 m²**

4) Circumference = 16.328 mm

Area = _____ **21.2264 mm²**

5) Circumference = 43.96 cm

Area = _____ **153.86 cm²**

6) Circumference = 40.82 m

Area = _____ **132.665 m²**

7) Circumference = 106.76 cm

Area = _____ **907.46 cm²**

Find the circumference of each circle from the given area. (Use π = $\frac{22}{7}$ or 3.14)

1) Area = 113.04 m²

Area = πr²

113.04 m² = 3.14 × r²

113.04 m² = r² ; **r = 6 m**

Circumference = 2πr

= 2 × 3.14 × 6 = **37.68 m**

2) Area = 490.625 mm²

Circumference = _____ **78.5 mm**

3) Area = 1256 cm²

Circumference = _____ **125.6 cm**

4) Area = 1017.36 cm²

Circumference = _____ **113.04 cm**

5) Area = 38.465 mm²

Circumference = _____ **21.98 mm**

6) Area = 701.5 m²

Circumference = _____ **94.2 m**

7) Area = 162.7776 mm²

Circumference = _____ **45.216 mm**