Area & Circumference of Circle

Name _____

Score _____

AC:25

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

1) Circumference = 18.84 mm

Circumference = 2πr

18.84 mm = 2 × 3.14 × r

18.84 mm = 6.28 × r ; **r = 3 mm**

Area = πr² = 3.14 × 3²

= 3.14 × 9 = **28.26 mm²**

2) Circumference = 128.74 m

Area = _____

3) Circumference = 27.004 cm

Area = _____

4) Circumference = 69.08 cm

Area = _____

5) Circumference = 100.48 m

Area = _____

6) Circumference = 11.932 mm

Area = _____

7) Circumference = 84.78 m

Area = _____

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

1) Area = 63.585 cm²

Area = πr²

63.585 cm² = 3.14 × r²

63.585 cm² = r² ; **r = 4.5 cm**

Circumference = 2πr

= 2 × 3.14 × 7 = **28.26 cm**

2) Area = 452.16 m²

Circumference = _____

3) Area = 2461.76 mm²

Circumference = _____

4) Area = 140.9546 mm²

Circumference = _____

5) Area = 226.865 cm²

Circumference = _____

6) Area = 2826 mm²

Circumference = _____

7) Area = 254.34 m²

Circumference = _____

Area & Circumference of Circle

Answer key

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

1) Circumference = 18.84 mm

Circumference = 2πr

18.84 mm = 2 × 3.14 × r

18.84 mm = 6.28 × r ; **r = 3 mm**

Area = πr^2 = 3.14 × 3^2

= 3.14 × 9 = **28.26 mm²**

2) Circumference = 128.74 m

Area = _____**1319.585 m²**_____

3) Circumference = 27.004 cm

Area = _____**58.0586 cm²**_____

4) Circumference = 69.08 cm

Area = _____**379.94 cm²**_____

5) Circumference = 100.48 m

Area = _____**803.84 m²**_____

6) Circumference = 11.932 mm

Area = _____**11.3354 mm²**_____

7) Circumference = 84.78 m

Area = _____**572.265 m²**_____

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

1) Area = 63.585 cm²

Area = πr^2

63.585 cm² = 3.14 × r^2

63.585 cm² = r^2 ; **r = 4.5 cm**

Circumference = 2πr

= 2 × 3.14 × 7 = **28.26 cm**

2) Area = 452.16 m²

Circumference = _____**75.36 m**_____

3) Area = 2461.76 mm²

Circumference = _____**175.84 mm**_____

4) Area = 140.9546 mm²

Circumference = _____**42.076 mm**_____

5) Area = 226.865 cm²

Circumference = _____**53.38 cm**_____

6) Area = 2826 mm²

Circumference = _____**188.4 mm**_____

7) Area = 254.34 m²

Circumference = _____**56.52 m**_____