



Area & Circumference of Circle

Name _____

Score _____

AC:27

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

1) Circumference = 16.956 m

$$\text{Circumference} = 2\pi r$$

$$16.956 \text{ m} = 2 \times 3.14 \times r$$

$$16.956 \text{ m} = 6.28 \times r ; r = \mathbf{2.7 \text{ m}}$$

$$\text{Area} = \pi r^2 = 3.14 \times 2.7^2$$

$$= 3.14 \times 7.29 = \mathbf{22.8906 \text{ m}^2}$$

2) Circumference = 31.4 cm

$$\text{Area} = \underline{\hspace{2cm}}$$

3) Circumference = 65.94 mm

$$\text{Area} = \underline{\hspace{2cm}}$$

4) Circumference = 169.56 m

$$\text{Area} = \underline{\hspace{2cm}}$$

5) Circumference = 200.96 mm

$$\text{Area} = \underline{\hspace{2cm}}$$

6) Circumference = 91.06 cm

$$\text{Circumference} =$$

$$\text{Area} = \underline{\hspace{2cm}}$$

7) Circumference = 6.28 m

$$\text{Area} = \underline{\hspace{2cm}}$$

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

1) Area = 1962.5 cm²

$$\text{Area} = \pi r^2$$

$$1962.5 \text{ cm}^2 = 3.14 \times r^2$$

$$625 \text{ cm}^2 = r^2 ; r = \mathbf{25 \text{ cm}}$$

$$\text{Circumference} = 2\pi r$$

$$= 2 \times 3.14 \times 25 = \mathbf{157 \text{ cm}}$$

2) Area = 50.24 m²

$$\text{Circumference} = \underline{\hspace{2cm}}$$

3) Area = 3419.46 mm²

$$\text{Circumference} = \underline{\hspace{2cm}}$$

4) Area = 754.385 m²

$$\text{Circumference} = \underline{\hspace{2cm}}$$

5) Area = 283.385 cm²

$$\text{Circumference} = \underline{\hspace{2cm}}$$

6) Area = 1384.74 mm²

$$\text{Circumference} = \underline{\hspace{2cm}}$$

7) Area = 530.66 cm²

$$\text{Circumference} = \underline{\hspace{2cm}}$$



Area & Circumference of Circle

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Answer key

AC:27

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

1) Circumference = 16.956 m

$$\text{Circumference} = 2\pi r$$

$$16.956 \text{ m} = 2 \times 3.14 \times r$$

$$16.956 \text{ m} = 6.28 \times r ; r = \mathbf{2.7 \text{ m}}$$

$$\text{Area} = \pi r^2 = 3.14 \times 2.7^2$$

$$= 3.14 \times 7.29 = \mathbf{22.8906 \text{ m}^2}$$

2) Circumference = 31.4 cm

$$\text{Area} = \underline{\mathbf{78.5 \text{ cm}^2}}$$

3) Circumference = 65.94 mm

$$\text{Area} = \underline{\mathbf{346.185 \text{ mm}^2}}$$

4) Circumference = 169.56 m

$$\text{Area} = \underline{\mathbf{2289.06 \text{ m}^2}}$$

5) Circumference = 200.96 mm

$$\text{Area} = \underline{\mathbf{3215.36 \text{ mm}^2}}$$

6) Circumference = 91.06 cm

$$\text{Circumference} =$$

$$\text{Area} = \underline{\mathbf{660.185 \text{ cm}^2}}$$

7) Circumference = 6.28 m

$$\text{Area} = \underline{\mathbf{3.14 \text{ m}^2}}$$

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

1) Area = 1962.5 cm²

$$\text{Area} = \pi r^2$$

$$1962.5 \text{ cm}^2 = 3.14 \times r^2$$

$$625 \text{ cm}^2 = r^2 ; r = \mathbf{25 \text{ cm}}$$

$$\text{Circumference} = 2\pi r$$

$$= 2 \times 3.14 \times 25 = \mathbf{157 \text{ cm}}$$

2) Area = 50.24 m²

$$\underline{\mathbf{25.12 \text{ m}}}$$

3) Area = 3419.46 mm²

$$\text{Circumference} = \underline{\mathbf{207.24 \text{ mm}}}$$

4) Area = 754.385 m²

$$\text{Circumference} = \underline{\mathbf{97.34 \text{ m}}}$$

5) Area = 283.385 cm²

$$\text{Circumference} = \underline{\mathbf{59.66 \text{ cm}}}$$

6) Area = 1384.74 mm²

$$\text{Circumference} = \underline{\mathbf{131.88 \text{ mm}}}$$

7) Area = 530.66 cm²

$$\text{Circumference} = \underline{\mathbf{81.64 \text{ cm}}}$$