



Area & Circumference of Circle

Name _____

Score _____

AC:24

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

1) Circumference = 6.28 in

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

$$6.28 \text{ in} = 2 \times 3.14 \times r$$

$$6.28 \text{ in} = 6.28 \times r ; r = 1 \text{ in}$$

$$\text{Area} = \pi r^2 = 3.14 \times 1^2$$

$$= 3.14 \times 1 = \mathbf{3.14 \text{ in}^2}$$

2) Circumference = 27.632 yd

$$\text{Area} = \text{_____}$$

3) Circumference = 157 ft

$$\text{Area} = \text{_____}$$

4) Circumference = 56.52 ft

$$\text{Area} = \text{_____}$$

5) Circumference = 54.54 in

$$\text{Area} = \text{_____}$$

6) Circumference = 81.64 yd

$$\text{Area} = \text{_____}$$

7) Circumference = 53.38 in

$$\text{Area} = \text{_____}$$

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

1) Area = 38.465 yd²

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

$$38.465 \text{ yd}^2 = 3.14 \times r^2$$

$$12.25 \text{ yd}^2 = r^2 ; r = \mathbf{3.5 \text{ yd}}$$

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

$$= 2 \times 3.14 \times 3.5 = \mathbf{21.98 \text{ yd}}$$

2) Area = 615.44 ft²

$$\text{Circumference} = \text{_____}$$

3) Area = 1808.64 in²

$$\text{Circumference} = \text{_____}$$

4) Area = 124.6266 ft²

$$\text{Circumference} = \text{_____}$$

5) Area = 803.84 yd²

$$\text{Circumference} = \text{_____}$$

6) Area = 346.185 in²

$$\text{Circumference} = \text{_____}$$

7) Area = 1256 yd²

$$\text{Circumference} = \text{_____}$$



Area & Circumference of Circle

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Answer key

AC:24

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

1) Circumference = 6.28 in

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

$$6.28 \text{ in} = 2 \times 3.14 \times r$$

$$6.28 \text{ in} = 6.28 \times r ; r = 1 \text{ in}$$

$$\text{Area} = \pi r^2 = 3.14 \times 1^2$$

$$= 3.14 \times 1 = \mathbf{3.14 \text{ in}^2}$$

2) Circumference = 27.632 yd

$$\text{Area} = \mathbf{60.7904 \text{ yd}^2}$$

3) Circumference = 157 ft

$$\text{Area} = \mathbf{1962.5 \text{ ft}^2}$$

4) Circumference = 56.52 ft

$$\text{Area} = \mathbf{254.34 \text{ ft}^2}$$

5) Circumference = 54.54 in

$$\text{Area} = \mathbf{94.985 \text{ in}^2}$$

6) Circumference = 81.64 yd

$$\text{Area} = \mathbf{530.66 \text{ yd}^2}$$

7) Circumference = 53.38 in

$$\text{Area} = \mathbf{226.865 \text{ in}^2}$$

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

1) Area = 38.465 yd²

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

$$38.465 \text{ yd}^2 = 3.14 \times r^2$$

$$12.25 \text{ yd}^2 = r^2 ; r = \mathbf{3.5 \text{ yd}}$$

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

$$= 2 \times 3.14 \times 3.5 = \mathbf{21.98 \text{ yd}}$$

2) Area = 615.44 ft²

$$\text{Circumference} = \mathbf{87.92 \text{ ft}}$$

3) Area = 1808.64 in²

$$\text{Circumference} = \mathbf{150.72 \text{ in}}$$

4) Area = 124.6266 ft²

$$\text{Circumference} = \mathbf{39.564 \text{ ft}}$$

5) Area = 803.84 yd²

$$\text{Circumference} = \mathbf{100.48 \text{ yd}}$$

6) Area = 346.185 in²

$$\text{Circumference} = \mathbf{65.94 \text{ in}}$$

7) Area = 1256 yd²

$$\text{Circumference} = \mathbf{125.6 \text{ yd}}$$