



Math worksheet on 'Geometry of Circles - Sector Area - Equation to Radius and Angle (Level 1)'. Part of a broader unit on 'Geometry - Intermediate - Practice'

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1 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 25}{6}$$

- a  $r=8$ , angle= $15^\circ$
- b  $r=1$ , angle= $0^\circ$
- c  $r=1$ , angle= $60^\circ$
- d  $r=8$ , angle= $120^\circ$
- e  $r=9$ , angle= $0^\circ$
- f  $r=5$ , angle= $60^\circ$

2 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 1}{4}$$

- a  $r=1$ , angle= $15^\circ$
- b  $r=1$ , angle= $120^\circ$
- c  $r=3$ , angle= $135^\circ$
- d  $r=1$ , angle= $45^\circ$
- e  $r=1$ , angle= $90^\circ$
- f  $r=5$ , angle= $75^\circ$

3 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 16}{3}$$

- a  $r=1$ , angle= $165^\circ$
- b  $r=8$ , angle= $45^\circ$
- c  $r=1$ , angle= $180^\circ$
- d  $r=4$ , angle= $120^\circ$
- e  $r=4$ , angle= $45^\circ$
- f  $r=4$ , angle= $165^\circ$

4 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 16}{4}$$

- a  $r=1$ , angle= $105^\circ$
- b  $r=4$ , angle= $90^\circ$
- c  $r=6$ , angle= $90^\circ$
- d  $r=1$ , angle= $60^\circ$
- e  $r=4$ , angle= $105^\circ$
- f  $r=6$ , angle= $75^\circ$

5 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 1}{6}$$

- a  $r=1$ , angle= $60^\circ$
- b  $r=5$ , angle= $60^\circ$
- c  $r=5$ , angle= $15^\circ$
- d  $r=3$ , angle= $120^\circ$
- e  $r=2$ , angle= $75^\circ$
- f  $r=2$ , angle= $60^\circ$

6 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 4}{12}$$

- a  $r=2$ , angle= $90^\circ$
- b  $r=1$ , angle= $75^\circ$
- c  $r=2$ , angle= $30^\circ$
- d  $r=3$ , angle= $90^\circ$
- e  $r=2$ , angle= $15^\circ$
- f  $r=3$ , angle= $30^\circ$

7 If the area of a sector of a circle is given by this equation, what is the radius of the circle and the sector angle?

$$\frac{\pi \cdot 9}{4}$$

- a  $r=1$ , angle= $75^\circ$
- b  $r=5$ , angle= $105^\circ$
- c  $r=3$ , angle= $90^\circ$
- d  $r=1$ , angle= $60^\circ$
- e  $r=3$ , angle= $150^\circ$
- f  $r=2$ , angle= $135^\circ$