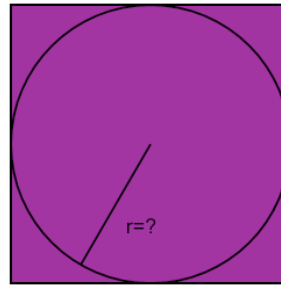# mobius

Math worksheet on *'Inscribed Circle in Square - Square Area to Circle Radius (Level 1)'*. Part of a broader unit on *'Inscribed Squares and Circles - Intro'*
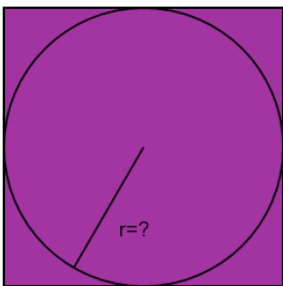
Learn online: app.mobius.academy/math/units/inscribed_squares_and_circles_intro/

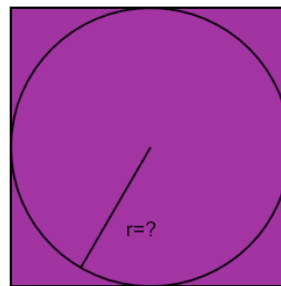**1** Find the radius of the circle inscribed in a square with area 49

a	b	c
14	98π	$\dfrac{\sqrt{49}}{2}$

d	e	f
$\dfrac{\sqrt{24}}{2}$	98	$\dfrac{98^2}{2}\pi$

2 Find the radius of the circle inscribed in a square with area 25

a	b	c
$\dfrac{13^2}{2}\pi$	$\dfrac{50}{\pi}$	$\dfrac{\sqrt{25}}{2}$

d	e	f
$\dfrac{\sqrt{12}}{2}$	$(\sqrt{25})^2\pi$	$\dfrac{50^2}{2}\pi$

3 Find the radius of the circle inscribed in a square with area 9

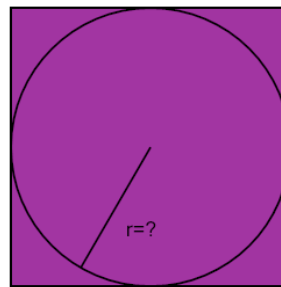| a	b	c
$\dfrac{\sqrt{4}}{2}$	$2\sqrt{\dfrac{9}{2\pi}}$	$\dfrac{9^2}{2}\pi$

d	e	f
$(\sqrt{6})^2\pi$	$\dfrac{\sqrt{9}}{2}$	$\dfrac{5^2}{2}\pi$

4 Find the radius of the circle inscribed in a square with area 16
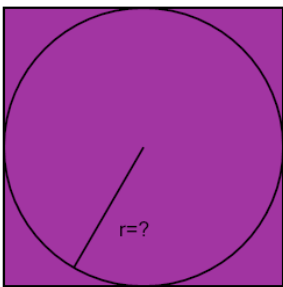
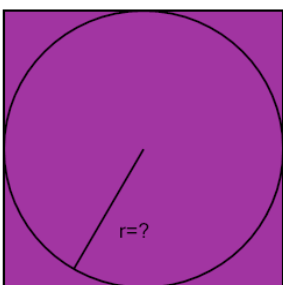| a	b	c
$2\sqrt{\dfrac{32}{2\pi}}$	$\dfrac{\sqrt{16}}{2}$	$\dfrac{32^2}{2}\pi$

d	e	f
$\dfrac{\sqrt{8}}{2}$	$2\sqrt{\dfrac{16}{2}}$	$\dfrac{8^2}{2}\pi$

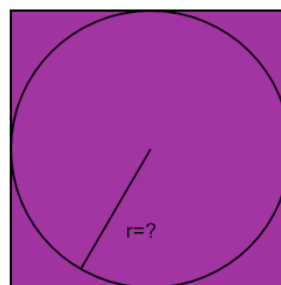**5** Find the radius of the circle inscribed in a square with area 64

a	b	c
$4\sqrt{16}$	$\dfrac{\sqrt{32}}{2}$	$\dfrac{\sqrt{64}}{2}$

d	e	f
$2\sqrt{\dfrac{16}{2}}$	$\dfrac{16^2}{2}\pi$	$(\sqrt{32})^2\pi$

6 Find the radius of the circle inscribed in a square with area 4

a	b	c
$\dfrac{4^2}{2}\pi$	$\dfrac{\sqrt{2}}{2}$	$4\sqrt{4}$

d	e	f
$\dfrac{4^2}{2}\pi$	$\dfrac{8^2}{2}\pi$	$\dfrac{\sqrt{4}}{2}$

7 Find the radius of the circle inscribed in a square with area 36

a	b	c
$\dfrac{18}{\pi}$	$\dfrac{\sqrt{18}}{2}$	72π

d	e	f
$2\sqrt{\dfrac{72}{2\pi}}$	$(\sqrt{36})^2\pi$	$\dfrac{\sqrt{36}}{2}$