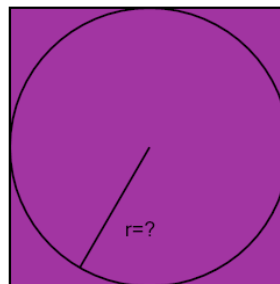# mobius

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'*
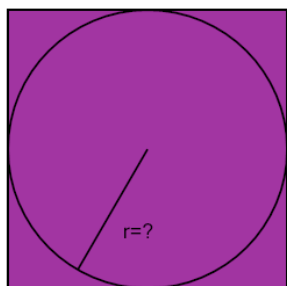
Learn online: app.mobius.academy/math/units/inscribed_squares_and_circles_intro/

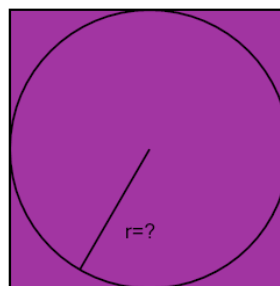**1** Find the radius of the circle inscribed in a square with area 49

a	b	c
$4\sqrt{49}$	98	$2\sqrt{\dfrac{49}{2}}$

d	e	f
$2\sqrt{\dfrac{98}{2}}$	$\dfrac{\sqrt{49}}{2}$	49

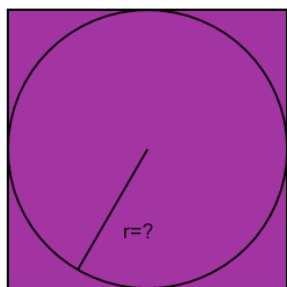**2** Find the radius of the circle inscribed in a square with area 25

a	b	c
$\dfrac{\sqrt{25}}{2}$	$2\sqrt{\dfrac{13}{2\pi}}$	10π

d	e	f
$2\sqrt{\dfrac{10}{2}}$	$4\sqrt{25}$	$\dfrac{10}{2}\sqrt{2}$

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

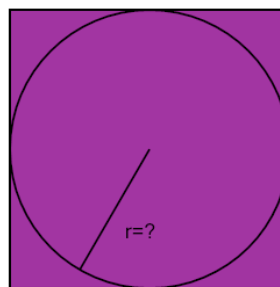| a	b	c
$4\sqrt{18}$	$2\sqrt{\dfrac{12}{2}}$	$\dfrac{\sqrt{36}}{2}$

d	e	f
$(\sqrt{18})^2\pi$	36π	$(\sqrt{12})^2\pi$

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

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

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

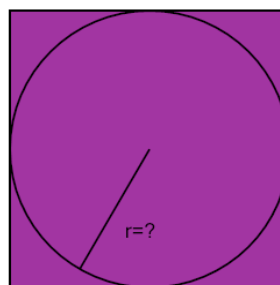**5** Find the radius of the circle inscribed in a square with area 64

a	b
$\dfrac{128}{\pi}$	64π

c	d
$\dfrac{32}{\pi}$	$\dfrac{128^2}{2}\pi$

e	f
$\dfrac{\sqrt{64}}{2}$	$(\sqrt{128})^2\pi$

6 Find the radius of the circle inscribed in a square with area 16
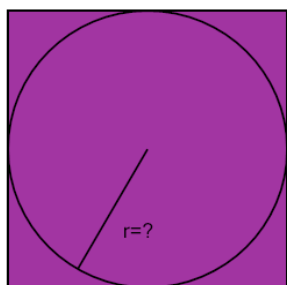
a	b	c
8	$(\sqrt{32})^2\pi$	$\dfrac{8}{2}\sqrt{2}$

d	e	f
8	$\dfrac{\sqrt{16}}{2}$	$4\sqrt{16}$

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

a	b	c
$(\sqrt{6})^2\pi$	$\dfrac{\sqrt{9}}{2}$	$\dfrac{5}{2}\sqrt{2}$

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