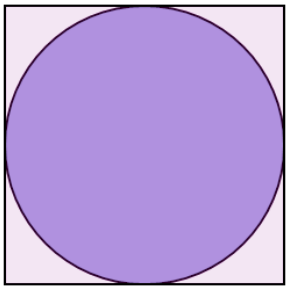
mobius

Math worksheet on *'Inscribed Circle in Square - Circle Area to Square Side Length (Level 1)'*. Part of a broader unit on *'Inscribed Squares and Circles - Intro'*

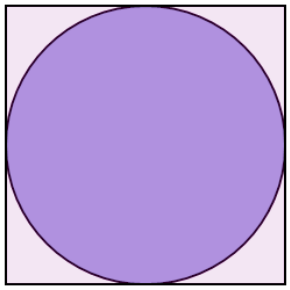
Learn online: app.mobius.academy/math/units/inscribed_squares_and_circles_intro/

1 Find the side length of a square that has an inscribed circle of area 6



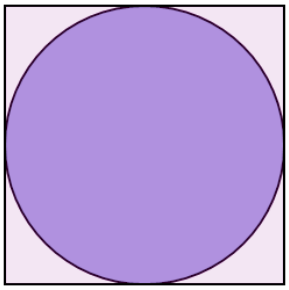
a	b	c
18	$2\sqrt{\frac{6}{\pi}}$	$\frac{72^2}{2}\pi$
d	**e**	**f**
$\frac{18^2}{2}\pi$	$2\sqrt{\frac{72}{2\pi}}$	72π

2 Find the side length of a square that has an inscribed circle of area 7



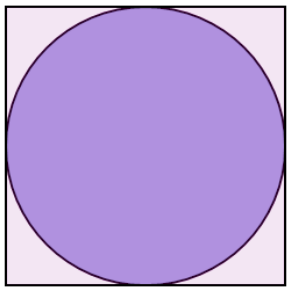
a	b	c
49π	$\frac{25}{\pi}$	25π
d	**e**	**f**
$(\sqrt{49})^2\pi$	$4\sqrt{98}$	$2\sqrt{\frac{7}{\pi}}$

3 Find the side length of a square that has an inscribed circle of area 2



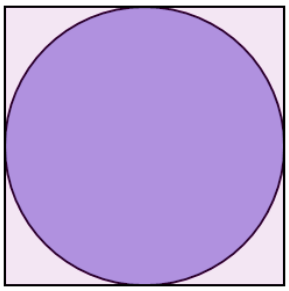
a	b	c
$\frac{4}{\pi}$	$\frac{4}{2}\sqrt{2}$	$\frac{4}{\pi}$
d	**e**	**f**
$2\sqrt{\frac{2}{\pi}}$	$\frac{8^2}{2}\pi$	$\frac{4}{\pi}$

4 Find the side length of a square that has an inscribed circle of area 8



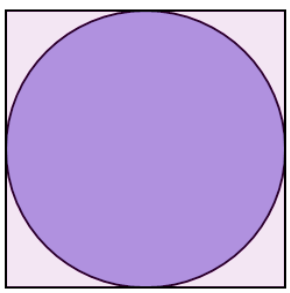
a	b	c
$\frac{16^2}{2}\pi$	$2\sqrt{\frac{64}{2\pi}}$	$\frac{32}{\pi}$
d	**e**	**f**
$\frac{32^2}{2}\pi$	$2\sqrt{\frac{8}{\pi}}$	16

5 Find the side length of a square that has an inscribed circle of area 3



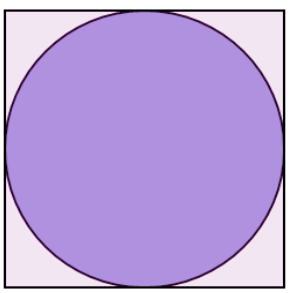
a	b	c
$2\sqrt{\frac{3}{\pi}}$	$2\sqrt{\frac{18}{2}}$	6
d	**e**	**f**
$\frac{18^2}{2}\pi$	$\frac{6}{2}\sqrt{2}$	$\frac{9}{\pi}$

6 Find the side length of a square that has an inscribed circle of area 5



a	b	c
$\frac{10^2}{2}\pi$	$2\sqrt{\frac{5}{\pi}}$	$(\sqrt{25})^2\pi$
d	**e**	**f**
$\frac{50^2}{2}\pi$	$4\sqrt{10}$	$2\sqrt{\frac{50}{2}}$

7 Find the side length of a square that has an inscribed circle of area 4



a	b	c
16π	$4\sqrt{8}$	$\frac{8^2}{2}\pi$
d	**e**	**f**
$\frac{8}{\pi}$	$\frac{16}{\pi}$	$2\sqrt{\frac{4}{\pi}}$