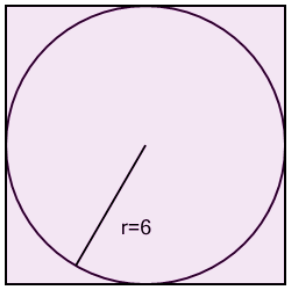
mobius

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

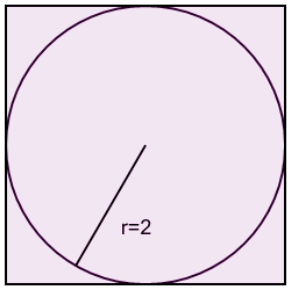
Learn online: app.mobius.academy/math/units/inscribed_squares_and_circles_intro/

1 Find the area of the square that has an inscribed circle with radius 6



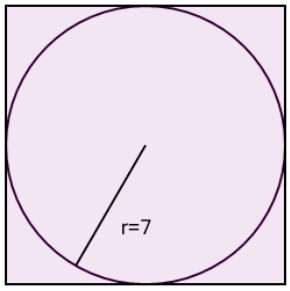
a	b	c
$\frac{36}{2}\sqrt{2}$	72	$2\sqrt{\frac{36}{2\pi}}$
d	**e**	**f**
144	$\frac{72}{\pi}$	$\frac{36}{\pi}$

2 Find the area of the square that has an inscribed circle with radius 2



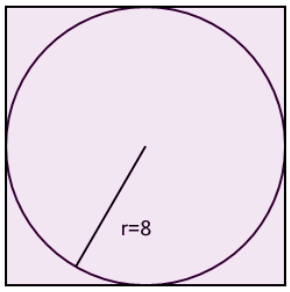
a	b	c
$2\sqrt{\frac{4}{2\pi}}$	8	$\frac{2^2}{2}\pi$
d	**e**	**f**
$(\sqrt{4})^2\pi$	$\frac{8^2}{2}\pi$	16

3 Find the area of the square that has an inscribed circle with radius 7



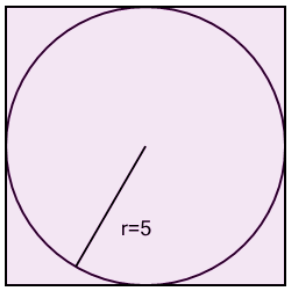
a	b	c
98	25	$(\sqrt{14})^2\pi$
d	**e**	**f**
196	$\frac{98}{\pi}$	$2\sqrt{\frac{49}{2\pi}}$

4 Find the area of the square that has an inscribed circle with radius 8



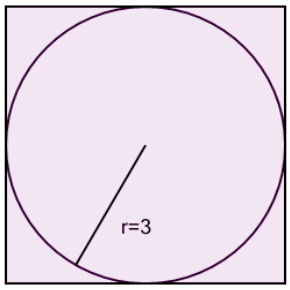
a	b	c
$\frac{16}{\pi}$	$2\sqrt{\frac{32}{2\pi}}$	256
d	**e**	**f**
$2\sqrt{\frac{16}{2\pi}}$	$2\sqrt{\frac{64}{2}}$	128

5 Find the area of the square that has an inscribed circle with radius 5



a	b	c
$2\sqrt{\frac{10}{2\pi}}$	$\frac{25}{2}\sqrt{2}$	50
d	**e**	**f**
$\frac{25^2}{2}\pi$	13π	100

6 Find the area of the square that has an inscribed circle with radius 3



a	b	c
$\frac{6^2}{2}\pi$	$\frac{5^2}{2}\pi$	$\frac{18}{2}\sqrt{2}$
d	**e**	**f**
18	$2\sqrt{\frac{6}{2\pi}}$	36