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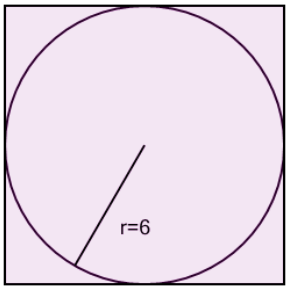
Math worksheet on *'Inscribed Circle in Square - Circle Radius to Square Area (Level 1)'*. Part of a broader unit on *'Inscribed Squares and Circles - Intro'*

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

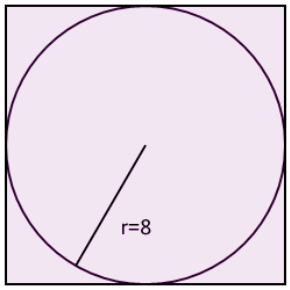
1 Find the area of the square that has an inscribed circle with radius 6



a $\frac{36}{2}\sqrt{2}$ b $2\sqrt{\frac{36}{2}}$ c 144

d $\frac{18^2}{2}\pi$ e $\frac{18^2}{2}\pi$ f $\frac{12}{\pi}$

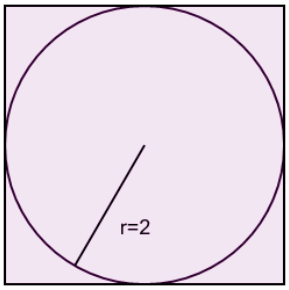
2 Find the area of the square that has an inscribed circle with radius 8



a $2\sqrt{\frac{128}{2\pi}}$ b $2\sqrt{\frac{32}{2}}$ c $\frac{32^2}{2}\pi$

d $\frac{64}{\pi}$ e $4\sqrt{32}$ f 256

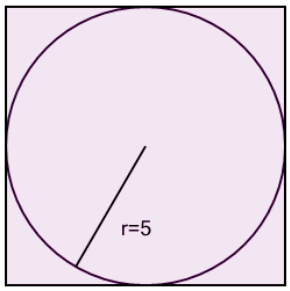
3 Find the area of the square that has an inscribed circle with radius 2



a $\frac{8}{\pi}$ b $4\sqrt{4}$ c 16

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

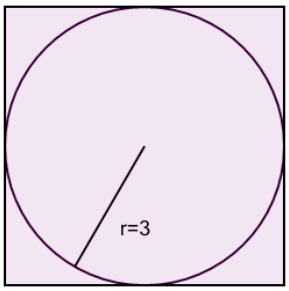
4 Find the area of the square that has an inscribed circle with radius 5



a 100 b $2\sqrt{\frac{50}{2}}$ c $\frac{10^2}{2}\pi$

d $(\sqrt{50})^2\pi$ e $\frac{25^2}{2}\pi$ f $4\sqrt{50}$

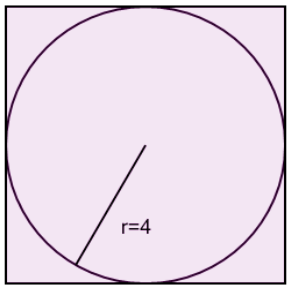
5 Find the area of the square that has an inscribed circle with radius 3



a $\frac{6^2}{2}\pi$ b $\frac{9}{\pi}$ c $(\sqrt{18})^2\pi$

d 36 e $2\sqrt{\frac{5}{2\pi}}$ f $\frac{5}{\pi}$

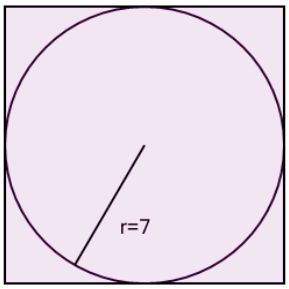
6 Find the area of the square that has an inscribed circle with radius 4



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

d $2\sqrt{\frac{16}{2\pi}}$ e $2\sqrt{\frac{16}{2}}$ f $2\sqrt{\frac{16}{2\pi}}$

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



a 196 b $2\sqrt{\frac{25}{2}}$ c $\frac{14}{\pi}$

d $\frac{49}{\pi}$ e $\frac{98}{\pi}$ f $\frac{98}{\pi}$