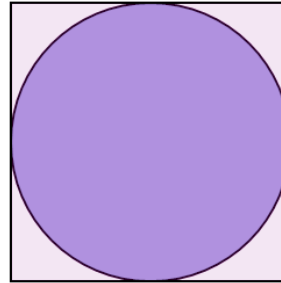




Math worksheet on 'Inscribed Circle in Square - Circle Area to Square Area (Level 1)'. Part of a broader unit on 'Inscribed Squares and Circles - Intro'

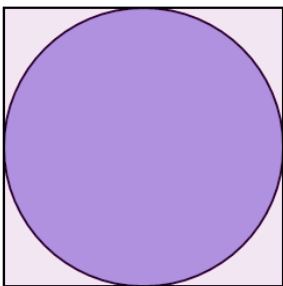
Learn online: [app.mobius.academy/math/units/inscribed\\_squares\\_and\\_circles\\_intro/](http://app.mobius.academy/math/units/inscribed_squares_and_circles_intro/)

- 1 Find the area of the square that has an inscribed circle of area 7



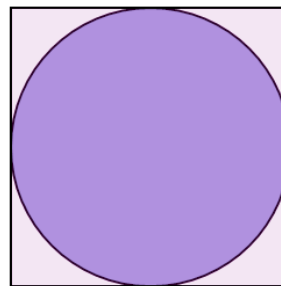
|                    |                    |                |
|--------------------|--------------------|----------------|
| a $\frac{28}{\pi}$ | b $\frac{14}{\pi}$ | c $98\pi$      |
| d $98$             | e $\frac{98}{\pi}$ | f $4\sqrt{98}$ |

- 2 Find the area of the square that has an inscribed circle of area 4



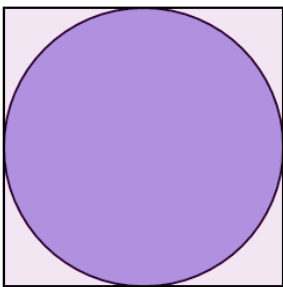
|                       |                             |                           |
|-----------------------|-----------------------------|---------------------------|
| a $(\sqrt{8})^2 \pi$  | b $2\sqrt{\frac{16}{2\pi}}$ | c $\frac{32}{2} \sqrt{2}$ |
| d $(\sqrt{16})^2 \pi$ | e $\frac{16}{\pi}$          | f $\frac{8}{\pi}$         |

- 3 Find the area of the square that has an inscribed circle of area 3



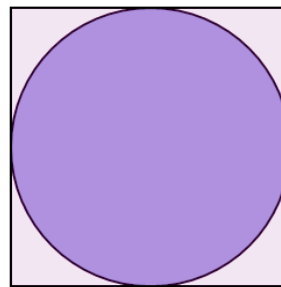
|                       |                      |                       |
|-----------------------|----------------------|-----------------------|
| a $\frac{9^2}{2} \pi$ | b $(\sqrt{5})^2 \pi$ | c $\frac{6}{\pi}$     |
| d $\frac{6^2}{2} \pi$ | e $\frac{12}{\pi}$   | f $\frac{6^2}{2} \pi$ |

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



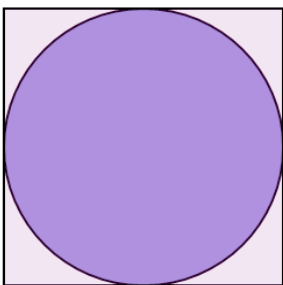
|                    |                    |                             |
|--------------------|--------------------|-----------------------------|
| a $\frac{10}{\pi}$ | b $\frac{20}{\pi}$ | c $2\sqrt{\frac{25}{2\pi}}$ |
| d $\frac{13}{\pi}$ | e $10$             |                             |

- 5 Find the area of the square that has an inscribed circle of area 8



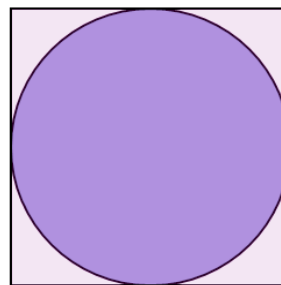
|                              |                        |                          |
|------------------------------|------------------------|--------------------------|
| a $2\sqrt{\frac{128}{2\pi}}$ | b $\frac{64^2}{2} \pi$ | c $2\sqrt{\frac{64}{2}}$ |
| d $2\sqrt{\frac{64}{2\pi}}$  | e $\frac{32}{\pi}$     | f $\frac{16}{\pi}$       |

- 6 Find the area of the square that has an inscribed circle of area 2



|                   |                   |                      |
|-------------------|-------------------|----------------------|
| a $\frac{2}{\pi}$ | b $4\sqrt{8}$     | c $(\sqrt{8})^2 \pi$ |
| d $\frac{4}{\pi}$ | e $\frac{8}{\pi}$ |                      |

- 7 Find the area of the square that has an inscribed circle of area 6



|                    |                        |                    |
|--------------------|------------------------|--------------------|
| a $\frac{36}{\pi}$ | b $\frac{12}{\pi}$     | c $18$             |
| d $4\sqrt{36}$     | e $\frac{18^2}{2} \pi$ | f $\frac{24}{\pi}$ |