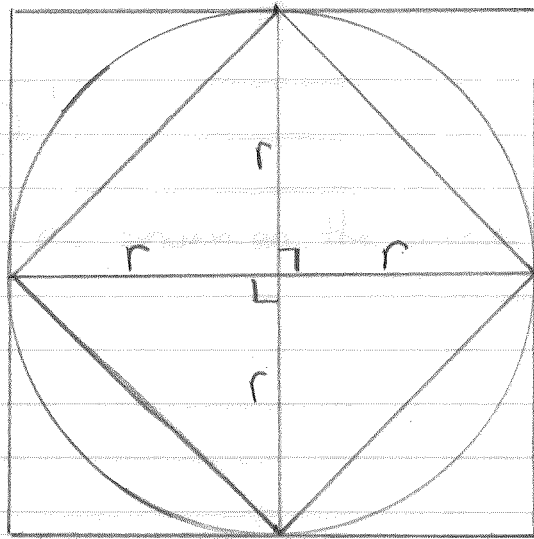


# 4



We are to assume that the area of the circle is halfway between the inscribed circle and circumscribed square. The circle bisects each length of the outside square thus giving us right angles in the center (circumscribed square)

The area of the outside square is  $4r^2$  (The sum of the 4 interior squares).

The area of the inscribed square is  $\sqrt{(r^2+r^2)}^2$  by pythagorean theorem.

Because we assume the circle is halfway between the two squares we can write

$$\frac{1}{2} (4r^2 + (\sqrt{r^2+r^2})^2) = \pi r^2$$

$$\frac{1}{2} (4r^2 + 2r^2) = \pi r^2$$

$$2r^2 + r^2 = \pi r^2$$

$$3r^2 = \pi r^2$$

$$\boxed{3 = \pi}$$

According to this conjecture  $\pi = 3$ .