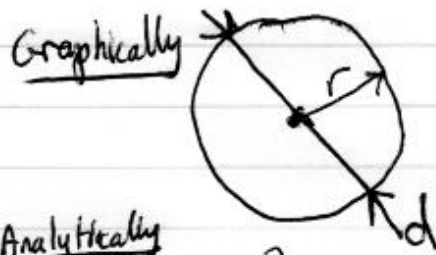


AREA OF A CIRCLE

Why is $\pi r^2 = \frac{\pi d^2}{4}$

$A = \pi r^2 = \frac{\pi d^2}{4}$



Analytically

$$d = 2r$$

$$\therefore r = \frac{d}{2}$$

$$\therefore \frac{\pi d^2}{4} = \frac{\pi (2r)^2}{4}$$

$2 \times 2 = 4$

$$= \underline{\underline{\pi r^2}} \quad \checkmark \checkmark$$