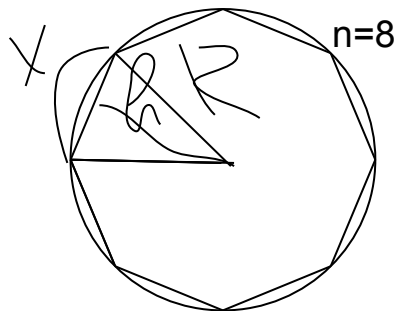


Площадь круга



$$S_0 = xh/2$$

$$S_m = n \cdot S_0 = n \cdot xh/2 = (nx) \cdot h/2 = P_m \cdot h/2 \rightarrow 2PR \cdot R/2 = PR^2$$

$$P_m \rightarrow C = 2PR$$

$$h \rightarrow R$$

$$\lim_{x \rightarrow \infty} \frac{(5-5x)}{(2x^2 - 9x)} = \frac{(5-5x)/x^2}{(2x^2 - 9x)/x^2} = \frac{(5/x^2 - 5/x)}{(2 - 9/x)} = 0 - 0 / 2 - 0 = 0/2 = 0$$

$$\lim_{x \rightarrow \infty} \frac{(10x^2 + 4x - 3)}{(5x^2 + 2x + 1)} = \frac{(10 + 4/x - 3/x^2)}{(5 + 2/x + 1/x^2)} = 10 / 5 = 2$$

$$\lim_{x \rightarrow \infty} \frac{(10x^3 + 4x - 3)}{(5x^2 + 2x + 1)} = \frac{(10x + 4/x^2 - 3/x^3)}{(5/x + 2/x^2 + 1/x^3)} = 10 / 0 = +\infty$$

$$\lim_{x \rightarrow 3} \frac{(x^2 - 6x + 9)}{(x-3)} = \frac{(x-3)^2}{(x-3)} = (x-3) / 1 = 0$$

$$\lim_{x \rightarrow 3} \frac{(x-3)}{(x^2 - 5x + 6)} = \frac{(x-3)}{(x-3)(x-2)} = 1 / (x-2) = 1 / 1 = 1$$

$$\lim_{x \rightarrow \infty} (x^2 + 4) \cdot \frac{1}{(x-5)} = \infty \cdot 0 = \left[\frac{1 + 4/x^2}{(1/x - 5/x^2)} \right] = 1/0 = \infty$$

$$\lim_{x \rightarrow \infty} (x^2 + 4) \cdot \frac{1}{(x^3 - 5)} = \infty \cdot 0 = \left[\frac{1/x + 4/x^3}{(1 - 5/x^3)} \right] = 0 / 1 = 0$$

$$0 / \text{число} = 0$$

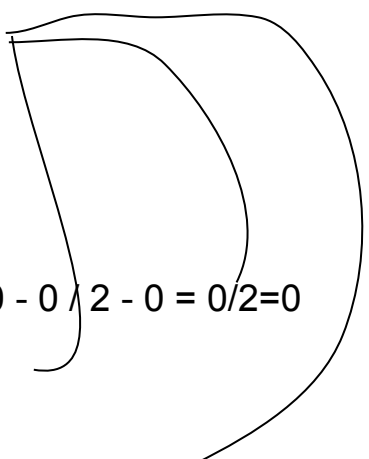
$$\text{число} / \text{бесконечность} = 0$$

$$\text{число} / 0 = \text{бесконечность}$$

$$0 / 0 = \text{неопределено}$$

$$\infty / \infty = \text{неопределено}$$

$$0^0 = \text{неопределено}$$



Семь смертных грехов

$$1. \frac{0}{0}$$

$$2. \frac{\infty}{\infty}$$

$$3. 0 \cdot \infty$$

$$4. \infty - \infty$$

$$5. 1^\infty$$

$$6. \infty^0$$

$$7. 0^0$$

$$x^2 - x^2$$