

**Nombre de alumno:** Paula Marina  
Aguilar Morales

**Nombre del profesor:**

Sebastian Dominguez

**Nombre del trabajo:**

**Materia:**

Matemáticas Aplicada

**Grado:**

6<sup>o</sup>

**Grupo:**

BRH

Comitán de Domínguez Chiapas a 11 de Junio de 2023.

27/JUL/23

Determina el área / integral definida

$$f(x) = x^2 - 4x - 5$$

$$\int_{-1}^5 \frac{x^3}{3} - 2x^2 - 5x \, dx$$

$$\int_{-1}^5 x^2 - 4x - 5 \, dx$$

$$\left| \frac{(5)^3}{3} - 2(5)^2 - 5(5) \right| - \left| \frac{(-1)^3}{3} - 2(-1)^2 - 5(-1) \right|$$

$$\frac{125}{3} - 50 - 25 - \left( \frac{-1}{3} - 2 + 5 \right)$$

$$\frac{125}{3} - \frac{225}{3} + \frac{1}{3} + \frac{6}{3} - \frac{15}{3} = \frac{108}{3} = 36$$

$$f(x) = -x + 2$$

$$\int_{-4}^5 \frac{-x^2 + 2x}{2} \, dx$$

$$\left| \frac{-(5)^2 + 2(5)}{2} \right| - \left| \frac{-(-4)^2 + 2(-4)}{2} \right|$$

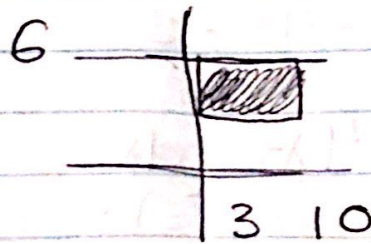
$$-\frac{25}{2} + \frac{20}{2} + \frac{16}{2} + \frac{16}{2}$$

$$-\frac{5}{2} + \frac{32}{2} = \frac{27}{2} = 13.5$$

Determina el area / integral definida

$$f(x) = 6$$

$$y = 6$$



$$\int_3^{10} 6x$$

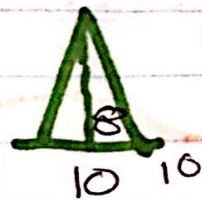
$$60 - 18 = 42$$

$$A = 42$$

$$f(x) = \frac{8x}{10}$$

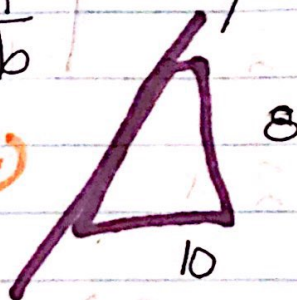
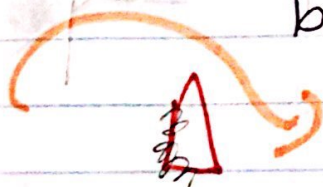
$$m = \frac{ny}{Ax}$$

$$m = \frac{h}{b}$$

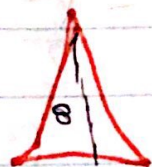


$$A = 40$$

$$\int_0^{10} \frac{8x^2}{10} = \frac{8x^2}{20}$$



$$\int_0^{10} \frac{2x^2}{5} = \frac{2(10)^2}{5} = \frac{2(100)}{5} = \frac{200}{5}$$



$A = 40$

$$f(x) = \sqrt{x^2 - 25}$$

$$\int_{-5}^5 (x^2 - 25)^{1/2}$$

$$\frac{5}{5}$$

$$x^2 + y^2 = 25$$

$$x^2 - 25 = -y^2$$

$$y^2 = 25 - x^2$$