



**NOMBRE DEL ALUMNO: CARLOS ANDRÉS
MENDOZA GÓMEZ**

**NOMBRE DEL PROFESOR: SEBASTIÁN
DOMINGUEZ**

NOMBRE DEL TRABAJO: SUPER NOTA

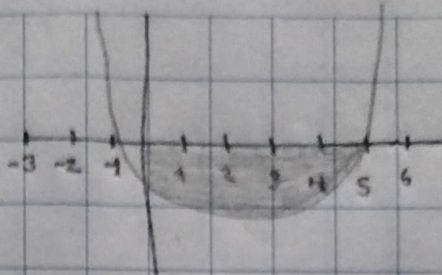
MATERIA: ADMINISTRACIÓN

GRADO: SEXTO CUATRIMESTRE

GRUPO: RECURSOS HUMANOS

Determina el área/integral definida

• $f(x) = x^2 - 4x - 5$



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

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

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

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

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

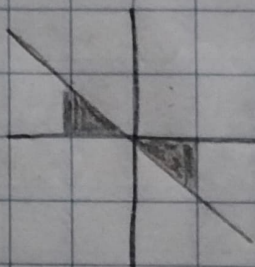
• $f(x) = -x + 2$ \int_{-4}^5

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

$$\int_{-4}^5 \frac{-(5)^2}{2} + 2(5) - \left[\frac{-(4)^2}{2} + 2(4) \right]$$

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

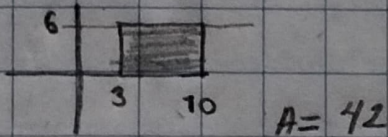
$$\frac{-5}{2} + \frac{32}{2} \Rightarrow \frac{27}{2} \Rightarrow \textcircled{13.5}$$



• $f(x) = 6$

$y = 6$

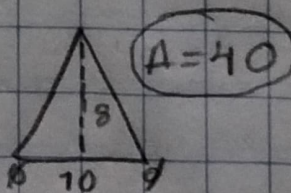
$$\int_3^{10} 6x$$



$$60 - 18 \Rightarrow 42$$

• $f(x) = \frac{8x}{10}$

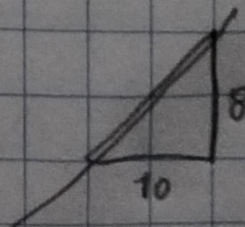
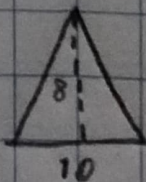
$$m = \frac{4y}{1x}$$



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

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

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



$A = 40$