Assessment 1 Full Name: Tyler Gillette

Version B

Follow the directions on the previous page. The points labeled in the figure are as follows:

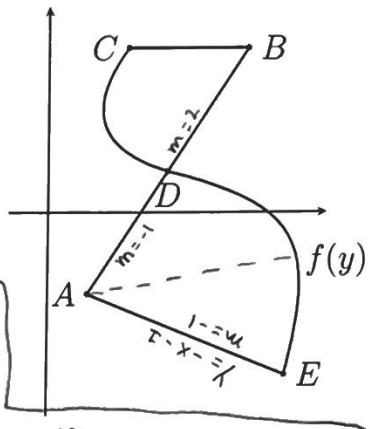
$A = (2, -3)$ $\quad M = \frac{y_2 - y_1}{x_2 - x_1}$

$B = (6, 5)$

$C = (3, 5)$ $\quad (y - y_1) = m(x - x_1)$

$D = (4, 1)$

$E = (7, -8)$



(1)

$M_{EA} = \frac{-3-(-8)}{2-7} = -1$

$M_{AD} = \frac{+3-1}{4-2} = 2$

$M_{DB} = \frac{5-1}{6-4} = 2$

*Confirmed AD and DB are the same slope

(2)

EA

$(y-(-3)) = -1(x-2)$

$y+3 = -x+2$

$-3 \quad = \quad -3$

$y_{EA} = -x-1$

*Confirmed AD and DB are the same Line

AD

$(y-(-3)) = 2(x-2)$

$y+3 = 2x-4$

$-3 \quad\quad -3$

$y_{AD} = 2x-7$

DB

$(y-1) = 2(x-4)$

$y-1 = 2x-8$

$+1 \quad\quad +1$

$y_{DB} = 2x-7$

(3)

$y_{EA} = -x-1$

$+1 \quad +1$

$-1 \cdot (y_{EA}+1) = (-x)\cdot -1$

$x_{EA} = -y-1$

$y_{AD} = 2x-7$

$y_{DB} \quad +7$

$+7$

$\frac{y+7}{2} = \frac{2x}{2}$

$x_{AD} = \frac{y}{2} + \frac{7}{2}$

x_{DB}

(4)

$$\int_{-8}^{-3} (-y-1) - (f(y))\,dy + \int_{-3}^{1} \left(\frac{y}{2}+\frac{7}{2}\right) - (f(y))\,dy + \int_{1}^{5} (f(y)) - \left(\frac{y}{2}+\frac{7}{2}\right)dy$$

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