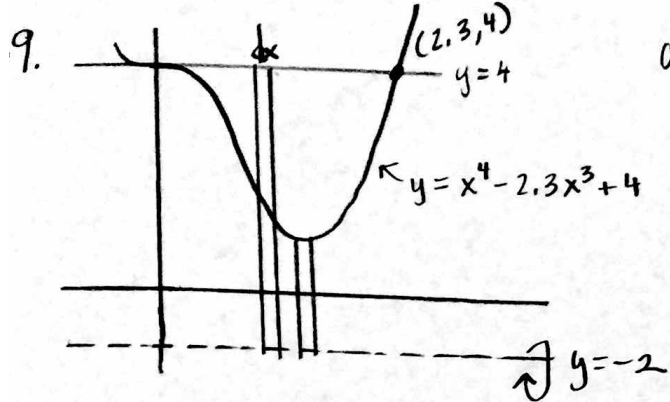


b) $\frac{\pi}{8} (1.493) = \boxed{0.586}$

c) $\frac{\sqrt{3}}{4} (1.493) = \boxed{0.646}$

d) $\frac{1}{4} (1.493) = \boxed{0.373}$



a)

$$V = \pi \int_{x=0}^{x=2.3} [(4+2)^2 - (x^4 - 2.3x^3 + 4 + 2)^2] dx$$

$$= \boxed{98.868}$$

b)

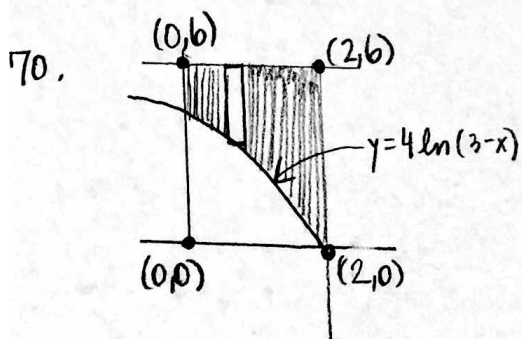
$$V = \frac{1}{2} \int_{x=0}^{x=2.3} (4 - (x^4 - 2.3x^3 + 4))^2 dx = \boxed{3.574}$$

c)

$$\int_{x=0}^{x=k} (4 - (x^4 - 2.3x^3 + 4)) dx = \int_{x=k}^{x=2.3} (4 - (x^4 - 2.3x^3 + 4)) dx$$

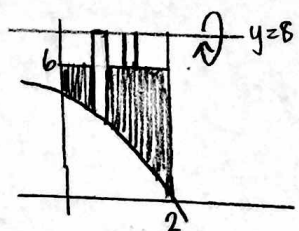
OR

$$\int_{x=0}^{x=k} (4 - (x^4 - 2.3x^3 + 4)) dx = \frac{1}{2} \int_{x=0}^{x=2.3} (4 - (x^4 - 2.3x^3 + 4)) dx = 1.609$$



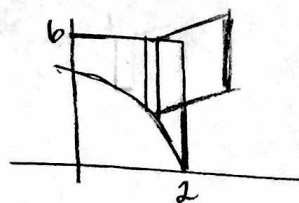
a)

$$A = \int_{x=0}^{x=2} (b - 4 \ln(3-x)) dx = \boxed{6.817}$$



b)

$$V = \pi \int_{x=0}^{x=2} [(8 - 4 \ln(3-x))^2 - (8 - b)^2] dx = \boxed{168.180}$$



c)

$$V = \int_{x=0}^2 (b - 4 \ln(3-x))^2 dx = \boxed{26.267}$$