Question 7

(a) $\frac{x^2}{2} + y^2 - 8 = 0$

$= \pi \int \frac{x^2}{2} + y^2 - 8 \, dx$

$= \pi \left[\frac{x^3}{6} + \frac{y^3}{3} - 8x \right]$

$=$

(b)(i) $\frac{3}{4} \times \frac{3}{4} = \frac{9}{16}$

NOTE $\because$ $0.75 = 3/4$

(ii) $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4} = \frac{1}{64}$

(c)(i) $x = \frac{(0) - 2}{(0) + 2}$

$= \frac{-2}{+2}$

$x = -1$