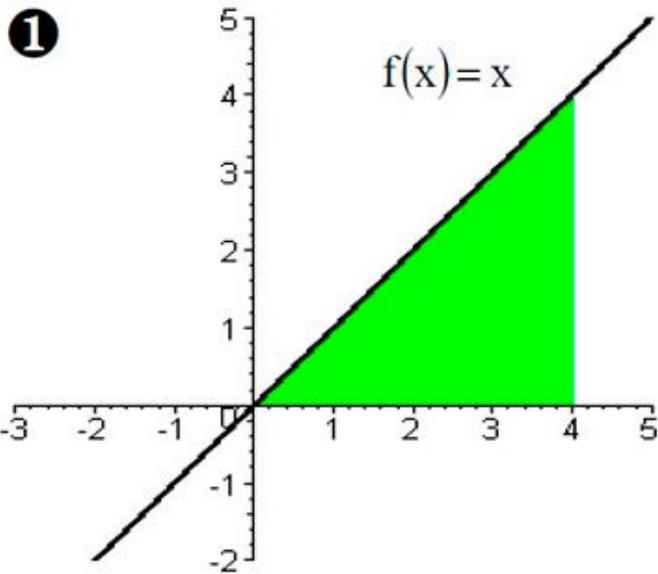
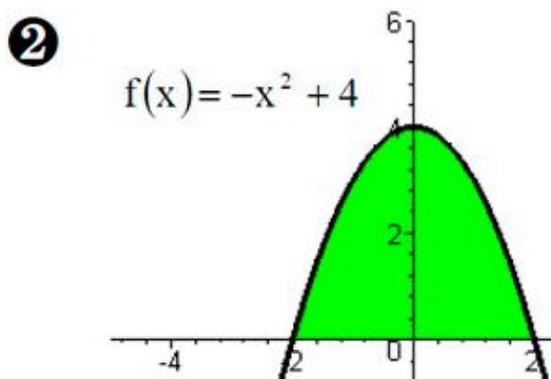


(I) Calcule as áreas pintadas abaixo



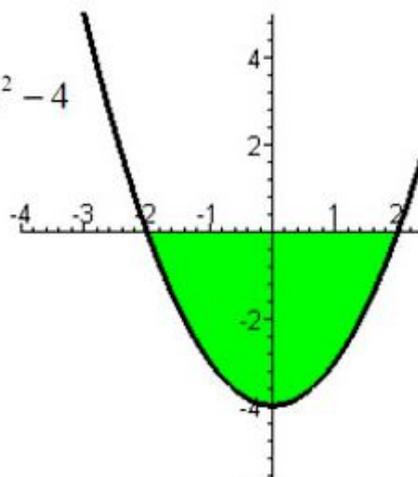
Resp:
 $A = 8$ u.a.



Resp:
 $A = \frac{32}{3}$ u.a.

3

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

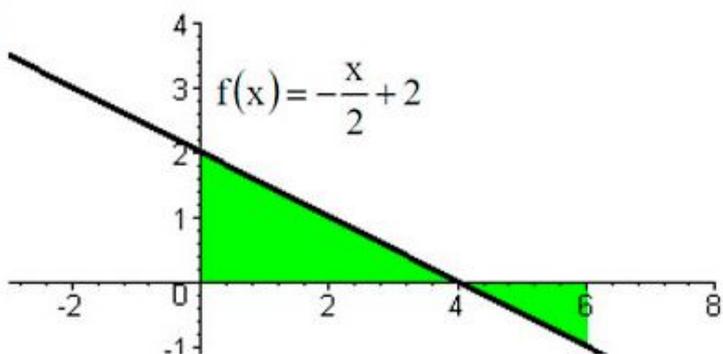


Resp:

$$A = \frac{32}{2} \text{ u.a.}$$

4

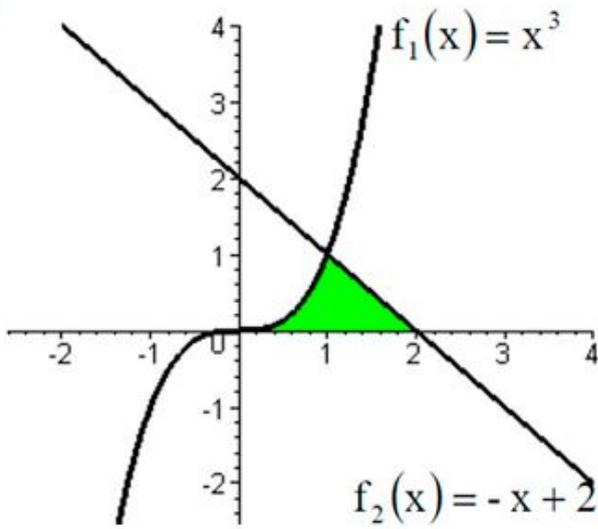
$$f(x) = -\frac{x}{2} + 2$$



Resp:

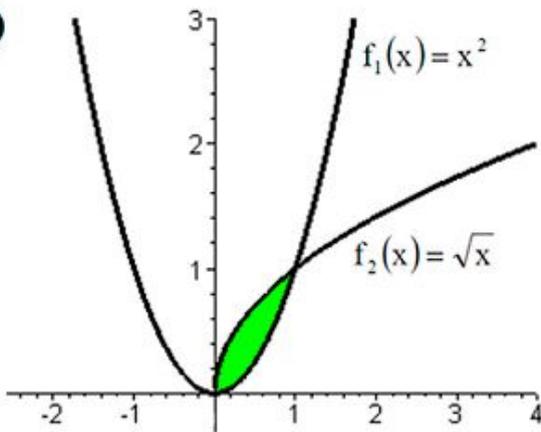
$$A = 5 \text{ u.a}$$

5



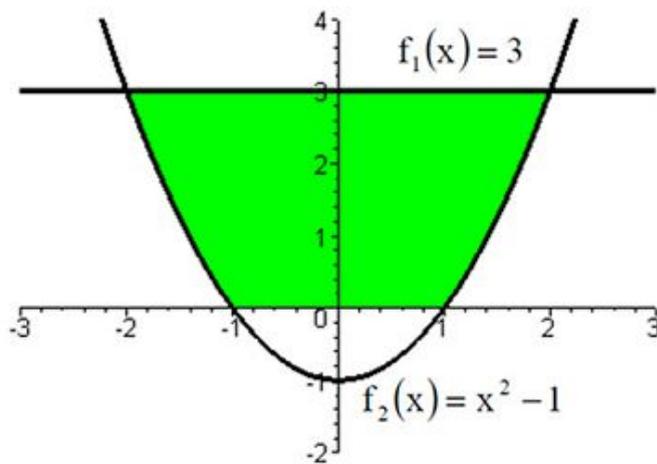
Resp:
3/4

6



Resp:
1/3

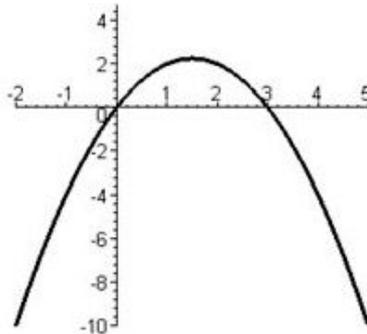
7



Resp:
28/3

(II) Em cada um dos itens que segue, calcule a área da região limitada pelas curvas cujas equações são dadas e com o auxílio dos gráficos também apresentados.

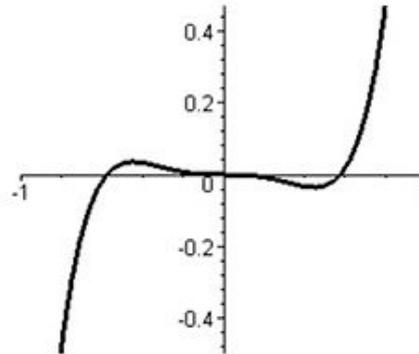
$$\textcircled{1} \begin{cases} y = 3x - x^2 \\ x = 4 \\ y = 0 \end{cases}$$



Resp:

$$A = \frac{19}{3} \text{ u.a}$$

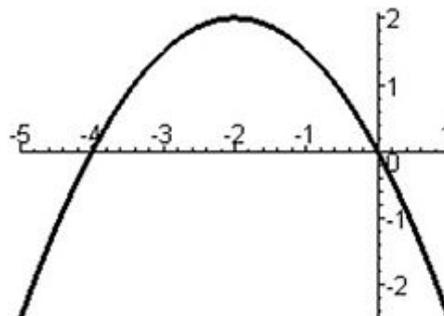
$$\textcircled{2} \begin{cases} y = 3x^5 - x^3 \\ x = -1 \\ x = 1 \\ y = 0 \end{cases}$$



Resp:

$$29/54$$

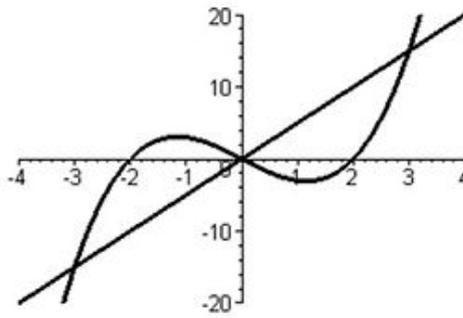
$$\textcircled{3} \begin{cases} x^2 + 4x + 2y = 0 \\ y = 0 \end{cases}$$



Resp:

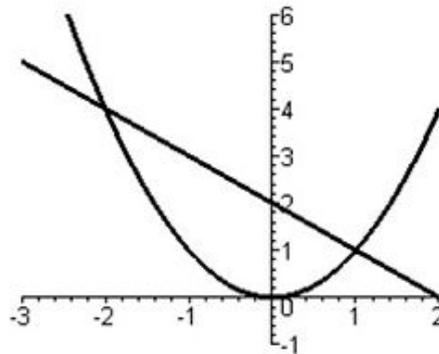
$$16/3$$

$$\textcircled{4} \begin{cases} y = x^3 - 4x \\ y = 5x \\ x \geq 0 \end{cases}$$



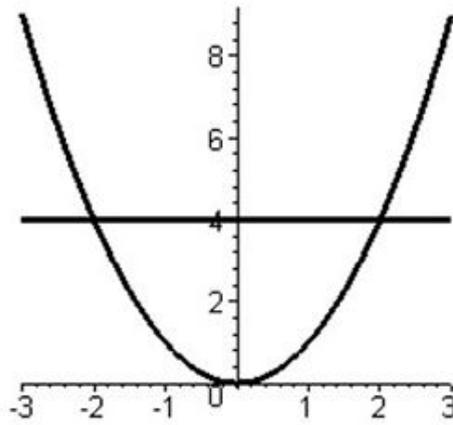
Resp:
81/4

$$\textcircled{5} \begin{cases} y = x^2 \\ y = 2 - x \end{cases}$$



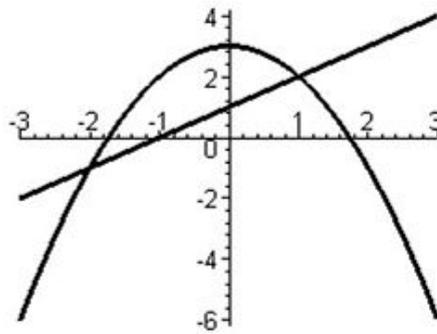
Resp:
9/2

$$\textcircled{6} \begin{cases} y = x^2 \\ y = 4 \end{cases}$$



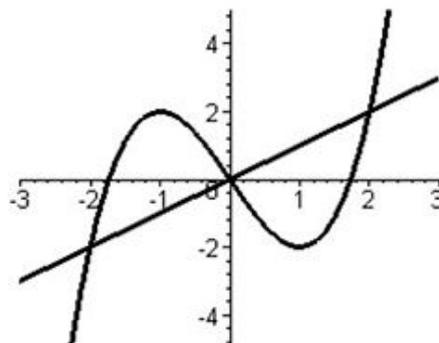
Resp:
32/3

$$\textcircled{7} \begin{cases} y = 3 - x^2 \\ y = x + 1 \end{cases}$$



Resp:
9/2

$$\textcircled{8} \begin{cases} y = x^3 - 3x \\ y = x \end{cases}$$



Resp:
8
