Prova

1-

$$y = x^2 - 7x + 10$$

$$= \int_6^7 x^2\,dx - \int_6^7 7x\,dx + \int_6^7 10\,dx$$

$$\int_6^7 x^2\,dx = \frac{127}{3} \qquad \int_6^7 7x\,dx = \frac{91}{2} \qquad \int_6^7 10\,dx = 10$$

$$= \frac{127}{3} - \frac{91}{2} + 10 = \frac{41}{6}$$

2-

a) $y1 = \frac{12}{x}$ $\int_3^{12} x \cdot 1\,dx = \frac{135}{2}$ $\left[\frac{x^2}{2}\right]_3^{12} = \frac{135}{2}$

b) $y2 = 2^x + x = \int_3^{12} x \cdot 2\,dx$ $\left[\frac{x^2}{2}\right]_3^{12} = \frac{135}{2}$

$$= 2 \cdot \frac{135}{2} = 135$$

FORONI