

Exercício 3

$$a) 3^2 \times 3^4 = 3^{2+4} = 3^6$$

$$b) 5^8 \times 5^7 = 5^{8+7} = 5^{15}$$

$$c) 3 \times 3^4 = 3^{1+4} = 3^5$$

$$d) \frac{3^5}{3^2} = 3^{5-2} = 3^3$$

$$e) \frac{8^3}{8^2} = 8^{3-2} = 8^1$$

$$f) \frac{4^5}{4^6} = 4^{5-6} = 4^{-1}$$

$$g) \frac{3^5}{3^8} = 3^{5-8} = 3^{-3}$$

$$h) 3^2 \times 5^2 = (3 \times 5)^2 = 15^2$$

$$i) 4^3 \times 5^3 = (4 \times 5)^3 = 20^3$$

Exercício 4

$$a) 10^2 \times 10^7 = 10^9$$

$$b) 10^{14} \times 10^{21} = 10^{14+21} = 10^{35}$$

$$c) \frac{10^2}{10^4} = 10^{2-4} = 10^{-2}$$

$$d) \frac{10^{21}}{10^{14}} = 10^{21-14} = 10^7$$

$$e) (10^4)^2 = 10^8$$

$$f) (10^3)^3 = 10^{3 \times 3} = 10^9$$