

## Problemas

2.13)

$$(a) \frac{6x+9}{12} = \frac{3(2x+3)}{3 \cdot 4} = \frac{2x+3}{4}$$

$$(b) \frac{7t^2+3t}{t} = \frac{t(7t+3)}{t} = 7t+3$$

$$(c) \frac{3x-6}{x^2-2x} = \frac{3(x-2)}{x(x-2)} = \frac{3}{x}$$

2.14)

$$\frac{2}{3x} + \frac{3}{x} = \frac{2}{3x} + \frac{9}{3x} = \frac{11}{3x}$$

2.15)

$$(a) \frac{2}{x^2} + \frac{3x}{5} = \frac{10}{5x^3} + \frac{3x^4}{5x^3} = \frac{3x^4+10}{5x^3}$$

$$(b) \frac{4}{3y} - \frac{s-y}{sy^2} = \frac{20y}{1sy^2} - \frac{3(s-y)}{1sy^2}$$

$$= \frac{20y - 1s + 3y}{1sy^2} = \frac{23y - 1s}{1sy^2}$$

$$2.16) \frac{3}{s} - \frac{7s}{s+2} = \frac{3(s+2)}{s(s+2)} - \frac{7s^2}{s(s+2)} = \frac{-7s^2+3s+6}{s(s+2)}$$

## Ejercicios

2.4.1)

$$(a) \frac{-5x^2 + 25}{5x} = \frac{5(-x^2 + 5)}{5x} = \frac{-x^2 + 5}{x}$$

$$(b) \frac{3r^3 - 21r}{9r^2} = \frac{3r(r^2 - 7)}{9r^2} = \frac{r^2 - 7}{3r}$$

$$(c) \frac{7}{3t - 8}$$

$$(d) \frac{3x(x+3)}{4x^2(x+3)} = \frac{3}{4x}$$

2.4.2)

$$\frac{3}{7x} - \frac{6x}{7} = \frac{3}{7x} - \frac{6x^2}{7x} = \frac{-6x^2 + 3}{7x}$$

2.4.3)

$$\begin{aligned} \frac{2t}{7} + \frac{9-2t}{t} &= \frac{2t^2}{7t} + \frac{63-14t}{7t} \\ &= \frac{2t^2 - 14t + 63}{7t} \end{aligned}$$

2.4.4)

$$\begin{aligned} \frac{3t-1}{6t^3} + \frac{5}{6t^2} &= \frac{6t-2}{6t^3} + \frac{5t}{6t^3} \\ &= \frac{11t-2}{6t^3} \end{aligned}$$

2.4.5)

$$\begin{aligned} \frac{3x}{x(x-1)} + \frac{2}{x} &= \frac{3x}{x(x-1)} + \frac{2x-2}{x(x-1)} \\ &= \frac{5x-2}{x(x-1)} \end{aligned}$$

2.4.6)

$$2 + \frac{3}{z} = \frac{z-2}{z-1}$$

$$\frac{2(z^2 - z)}{z(z-1)} + \frac{3(z-1)}{z(z-1)} - \frac{z(z-2)}{z(z-1)}$$

$$\frac{2z^2 - \cancel{z} + 3z - 3 - z^2 + \cancel{z}}{z(z-1)} = \frac{z^2 + 3z - 3}{z(z-1)}$$