

$$\begin{aligned} \text{Ex 1: } A &= 5 \times 10^{12} - 12 \times 10^{11} \\ &= 50 \times 10^{11} - 12 \times 10^{11} \\ &= (50 - 12) \times 10^{11} \\ &= 38 \times 10^{11} \\ &= \underline{3,8 \times 10^{12}} \end{aligned}$$

$$\begin{aligned} B &= 3 \times 10^7 \times 11 \times (10^{-5})^2 \\ &= 33 \times 10^7 \times 10^{-10} \\ &= 33 \times 10^{-3} \\ &= \underline{3,3 \times 10^{-2}} \end{aligned}$$

$$C = \frac{5 \times 10^8 \times 7 \times 10^{-4}}{44 \times 10^2}$$

$$= \frac{5 \times 7}{2 \times 4} \times \frac{10^4}{10^2}$$

$$= 25 \times 10^2$$

$$= \underline{250}$$

$$D = \frac{3 \times 10^{-5} \times 6 \times 10^{-3}}{12 \times 10^{-4} \times 10^2}$$

$$= \frac{3 \times 6}{2 \times 6} \times \frac{10^{-8}}{10^{-2}}$$

$$= 1,5 \times 10^{-8+2}$$

$$= 1,5 \times 10^{-6}$$

$$= \underline{0,0000015}$$

$$\text{Ex 2: } A = (5x-1)(5x+1)$$

$$= 25x^2 - 1$$

$$\begin{aligned} B &= (3-2x)^2 \\ &= 9 - 12x + 4x^2 \end{aligned}$$

$$\begin{aligned} C &= x^2 - 14x + 49 \\ &= (x-7)^2 \end{aligned}$$

$$\begin{aligned} D &= (x-1)(2x+7) - (5x+2)(2x+7) \\ &= (2x+7) [(x-1) - (5x+2)] \\ &= (2x+7)(x-1-5x-2) \\ &= (2x+7)(-3-4x) \end{aligned}$$

$$(1) \quad 2-5x = 7-3x$$

$$3x - 5x = 7 - 2$$

$$-2x = 5$$

$$x = \frac{-5}{2}$$

$$S = \left\{ -\frac{5}{2} \right\}$$

$$(2) \quad (5-x)(4x-1) = 0$$

$$5-x=0 \text{ ou } 4x-1=0$$

$$x=5 \text{ ou } x=1/4$$

$$S = \left\{ \frac{1}{4}; 5 \right\}$$