

3.

$$3.000.000 +$$

$$3.000.000 \times 6 = 18.000.000$$

$$3.000.000 \times 10 = 30.000.000$$

4.

$$30.000.000 \cdot \left(\frac{5}{15}\right)$$

$$\frac{150.000.000}{15} = 10.000.000$$

$$5. 30.000.000 \div 5 = 6.000.000$$

$$6.000.000 \times 3 = 18.000.000$$

$$30.000.000 - 18.000.000 = 12.000.000$$

$$6. 30.000.000 \% 1 = 300.000$$

$$300.000$$

$$2,45$$

$$15.000,00$$

$$12.000,00$$

$$6.000,00$$

$$\hline 735.000,00$$

$$735.000,00 \times 12 = 8.820.000$$

$$8.820.000 + 30.000.000$$

$$\boxed{38.820.000}$$

7.

$$\text{Log}_2(x^2) + 3\text{Log}_2(x) = -10$$

$$2\text{Log}_2(|x|) + 3\text{Log}_2(x) = -10$$

$$2\text{Log}_2(x) + 3\text{Log}_2(x) = -10$$

$$5\text{Log}_2(x) = -10$$

$$\text{Log}_2(x) = 2$$

$$x = 2^2$$

$$x = 4$$

9. $2^{3x-12} \cdot 8^x = 1$

$$2^{3x-12} (2^3)^x = 1$$

$$2^{3x-12} \cdot 2^{3x} = 1$$

$$2^{3x-12+3x} = 1$$

$$3x - 12 + 3x = \text{Log}_2(1)$$

$$3x + 3x - 12 = 0$$

$$6x - 12 = 0$$

$$(6x - 12) + 12 = 12$$

$$x = 2^2 - 1$$

$$6x - 12 + 12 = 12$$

$$x = 2$$

$$6x = 12$$

$$\frac{6x}{6} = \frac{12}{6}$$

$$x = \frac{2^2 \cdot 3}{2 \cdot 3}$$