

Lista de Exercícios – Expressões Numéricas

Primeira bateria

1) $2 + 8 - 3 - 5 + 15 =$

2) $12 + [35 - (10 + 2) + 2] =$

3) $[(18 + 3 \cdot 2) \div 8 + 5 \cdot 3] \div 6 =$

4) $37 + [-25 - (-11 + 19 - 4)] =$

5) $60 \div \{2 \cdot [-7 + 18 \div (-3 + 12)]\} - [7 \cdot (-3) - 18 \div (-2) + 1] =$

6) $-8 + \{-5 + [(8 - 12) + (13 + 12)] - 10\} =$

7) $3 - \{2 + (11 - 15) - [5 + (-3 + 1)] + 8\} =$

8) $[-1 + (2^2 - 5 \cdot 6)] \div (-5 + 2) + 1 =$

9) $[\sqrt{100} - (2^4 - 8) \cdot 2 - 24] \div [2^2 - (-3 + 2)] =$

10) $\{[(8 \cdot 4 + 3) \div 7 + (3 + 15 \div 5) \cdot 3] \cdot 2 - (19 - 7) \div 6\} \cdot 2 + 12 =$

Respostas:

1) 17

2) 37

3) 3

4) 8

5) 5

6) -2

7) 0

8) 10

9) -6

10) 100

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Segunda bateria

$$1) \frac{4}{5} \cdot (3 + 0,4) - 3,21 =$$

$$2) \frac{4}{3} + \frac{7}{5} \cdot \left(\frac{1}{2} + \frac{4}{9} \right) - \frac{1}{5} =$$

$$3) \frac{\frac{4}{5} \cdot \left(\frac{7}{3} - 1 \right)}{\frac{2}{9} - 3} =$$

$$4) \left\{ 4 + 2 \cdot \left[32 - \frac{1}{4} \cdot \left(\frac{2}{3} - \frac{1}{8} \right) + 2 \right] + 16 \right\} + 1 =$$

$$5) 3 \cdot \left\{ -1 + 12 \cdot \left[-13 + 4 \cdot \left(1 - \frac{1}{3} \right) - 1 \right] - 1 \right\} =$$

$$6) \left[\left(\frac{1}{2} \cdot \frac{1}{3} \right) + \frac{4}{6} \right] =$$

$$7) \left[\left(1 + \frac{1}{2} \right)^2 - 2 \right] =$$

$$8) \frac{1}{5} + \left\{ \left[\frac{4}{9} \div \left(\frac{1}{2} \cdot \frac{2}{4} - \frac{1}{9} \right) \right] \right\} =$$

$$9) \left(\frac{2}{5} \cdot \frac{5}{3} \right) \div \frac{2}{3} =$$

$$10) \left(4 - \frac{4}{5} \right) \div \left(9 + \frac{1}{3} \right) =$$

Respostas:

1) $-\frac{49}{100}$ ou $-0,49$

2) $\frac{221}{90}$

3) $-\frac{48}{125}$ ou $-0,384$

4) $\frac{4259}{48}$

5) -414

6) $\frac{5}{6}$ ou $0,8\bar{3}$

7) $\frac{1}{4}$ ou $0,25$

8) $\frac{17}{5}$ ou $3,4$

9) 1

10) $\frac{12}{35}$

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Terceira bateria

$$1) \left[\frac{3 \cdot \left(\frac{-3}{4}\right)^{-2} + 6 \cdot \left(\frac{3^{-1}}{4}\right) - 4}{7 \cdot \left(\frac{-3}{4}\right)^{-1} + 2} \right]^{-1} + 4 =$$

$$2) \frac{\left[\frac{(2^2)^2 + 3^2}{2^2 \cdot 3^2} \right]^{-\frac{1}{2}} \cdot [0,5 + (3)^{-1}]}{\left(\frac{1}{2+3}\right)^{\frac{1}{2}} + \frac{(2)^{\frac{1}{2}}}{2-3}} =$$

$$3) \frac{\left(\frac{1}{64} \cdot \sqrt{16}\right)}{8^{-2}} \cdot 16^{-\frac{1}{2}} + \frac{\sqrt{64}}{2^4 \cdot 2^{-1}} =$$

$$4) \frac{\left[\frac{6}{9} \cdot (10 + \sqrt[3]{125}) \cdot 0,5 \right]^{\frac{1}{2}} \div \left[\left(\frac{1}{2} + \frac{5}{3} + \frac{5}{6} + 5\right)^{\frac{1}{2}} + \sqrt{2+3} \right]}{\frac{\sqrt{2^4 - 2^3}}{8 \div 2^3} - \sqrt{2} \cdot \sqrt{2,5}} =$$

Respostas:

1) 0

2) $\frac{\sqrt{5} + \sqrt{2}}{3}$

3) 2

4) $\frac{\sqrt{5}}{3}$