

Lista 2

Anápolis, 11 de setembro de 2023.

Docente: Matheus Marques Portela

Nome da disciplina: Limite e Derivada de uma variável

RA: 2310823

RESPOSTA

$$1) 4^4 = 256$$

$$2) 5^3 = 125$$

$$3) (-3)^5 = -243$$

$$4) (-4)^2 = 16$$

$$5) -5^2 = -25$$

$$6) -7^2 = -49$$

$$7) -2^2 \cdot 4 = -16$$

$$8) -3^2 \cdot 5 = -45$$

$$9) 9^0 = 1$$

$$10) -8 \times^0 = -8 \cdot 1 = -8$$

$$18) 5 \cdot 2^{-4} \cdot 32 = 5 \cdot \frac{1}{2^4} \cdot 32 = \frac{5}{1} \cdot \frac{1}{16} \cdot \frac{32}{1} = \frac{160}{16} = 10$$

$$19) -6 \cdot 3^{-2} \cdot 81 = -6 \cdot \frac{1}{3^2} \cdot 81 = \frac{-6}{1} \cdot \frac{1}{9} \cdot \frac{81}{1} = \frac{-486}{9} = -54$$

$$20) 6 \cdot 4^2 \cdot 4^{-4} = 6 \cdot 16 \cdot \frac{1}{4^4} = \frac{6}{1} \cdot \frac{16}{1} \cdot \frac{1}{256} = \frac{96}{256} = \frac{12}{32} = \frac{3}{8}$$

$$21) x^2 \cdot x^3 \cdot x^5$$

$$22) y^3 \cdot y^5 = y^8$$

$$23) x^2 \cdot x^{-3} = x^{-1} = \frac{1}{x}$$

$$24) y^3 \cdot y^{-7} = y^{-4} = \frac{1}{y^4}$$

$$25) (x^2)^3 = x^6$$

$$11) 10^{-1} = \frac{1}{10} \text{ ou } 0,1$$

$$12) a^{-1} = \frac{1}{a}$$

$$13) 8^{-2} = \frac{1}{8^2} = \frac{1}{64}$$

$$14) 3^{-4} = \frac{1}{3^4} = \frac{1}{81}$$

$$15) -6 \cdot 5^2 = -6 \cdot 25 = -150$$

$$16) -2 \cdot 4^2 = -2 \cdot 16 = -32$$

$$17) 8 \cdot 2^{-3} \cdot 5 = 8 \cdot \frac{1}{2^3} \cdot 5 = \frac{8}{1} \cdot \frac{1}{8} \cdot \frac{5}{1} = \frac{40}{8} = 5$$

$$18) \dots$$

$$26) (y^3)^2 = y^6$$

$$27) (4a)^3 = 4^3 \cdot a^3 = 64a^3$$

$$28) (4x^2)^3 = 4^3 \cdot (x^2)^3 = 64x^6$$

$$29) (-2t)^3 = -2^3 \cdot t^3 = -8t^3$$

$$30) (-3b)^4 = -3^4 \cdot b^4 = -81b^4$$

$$1) \sqrt{100} = 10$$

$$2) \sqrt{121} = 11$$

$$3) -\sqrt{144} = -12$$

$$4) \sqrt{-169} = \text{não é real}$$

$$5) \sqrt[3]{-216} = -6$$

$$6) \sqrt[3]{-125} = -5$$

$$7) \sqrt[3]{343} = 7$$

$$8) -\sqrt[3]{-27} = 27$$

$$9) \sqrt[3]{1} = 1$$

$$10) \sqrt[3]{-1} = -1$$

$$11) \sqrt[3]{0} = 0$$

$$12) \sqrt[3]{0} = 0$$

$$13) \sqrt{-16} = \text{não é real}$$

$$14) \sqrt[3]{-1} = -1$$

$$15) (-27)^{\frac{2}{3}} = (-27)^2 = 729 \Rightarrow \sqrt[3]{729} = 9$$