

$$\begin{array}{r} 3 \\ 2 \overline{) 7135} \\ \underline{113} \end{array}$$

$$13 - x^2 + 3x - 2 \sqrt{x^4 - 2x^3 - 11x^2 + 30x - 20}$$

$$\begin{array}{r} x^2 - 5x + 6 \\ -x^4 - 3x^3 + 2x^2 \\ \hline +5x^3 + 15x^2 - 10x \\ \hline 6x^2 - 20x - 20 \\ -6x^2 - 18x + 12 \\ \hline 2x - 8 \end{array}$$

$$\begin{array}{r} 4 \\ 2 \\ 1 \end{array} \left| \begin{array}{r} 2 \\ 2 \end{array} \right) 4 \quad \sqrt[3]{4^2} \quad \sqrt{1}$$

$$10. = (3x \cdot 2y^3) (4x^{\frac{1}{2}} + 1y^{\frac{1}{2}} + 2)$$

$$= (3x \cdot 16y) (4x + 1 + 2)$$

$$= (48xy) (4x + 3)$$

$$192x^2y + 144xy$$

$$11. = (4 \cdot 1 \cdot \frac{2}{3} \cdot 2x) (-1 \cdot 2x - 1)$$

$$= \left(\frac{12}{3} \cdot \frac{3}{3} \cdot \frac{2}{3} \cdot \frac{6}{3}x \right) (-2x - 1)$$

$$= \left(\frac{432}{81} \right) (-2x - 1)$$

$$= \left(\frac{16}{3}x \right) \left(-\frac{2}{1}x - \frac{1}{1} \right)$$

$$= -\frac{32}{3}x^2 - \frac{16}{3}x$$

$$8. \quad 2mx + 6(b^2 + c^2) - 4d^2$$

$$= 2 \cdot \frac{1}{2}x + 6(2^2 + 3^2) - 4(4)^2$$

$$= \frac{4}{2} \cdot \frac{1}{2}x + 6(4 + 9) - 256$$

$$= \frac{4}{4}x + 6(13) - 256$$

$$= 1x + 78 - 256$$

$$= 1x - 178$$

$$9. \quad b^2(c+d) - a^2(m+n) + 2x$$

$$= 4(3+4) - 1\left(\frac{1}{2} + \frac{2}{3}\right) + 2x$$

$$\frac{1}{2} + \frac{2}{3} = \frac{3+4}{6} = \frac{7}{6}$$

$$= 4(7) - 1\left(\frac{7}{6}\right) + 2x$$

$$= 28 - \frac{6}{6} \cdot \frac{6}{6} + 2x$$

$$= 28 - 6 + 2x$$

$$= 22 + 2x$$

1 1

Hallar el valor numérico de las sig. expresiones:

S/º $a=1, b=2, c=3, d=4, m=\frac{1}{2}, p=\frac{1}{4}, n=\frac{2}{3}$

$$\begin{aligned} 5.- &= (a+b) c-d \\ &= (1+2) 3-4 \\ &= (3) = 1 \\ &= 3 \end{aligned}$$

$$\begin{aligned} 6.- &= (b-m)(c-n)+4a^2 \\ &= (2-\frac{1}{2})(3-\frac{2}{3})+4(1) \end{aligned}$$

$$= (\frac{4}{2}-\frac{1}{2})(\frac{9}{3}-\frac{2}{3})+4$$

$$= (\frac{3}{2})(\frac{7}{3}) + 16$$

$$\begin{aligned} 7.- &= (2m+3n)(4p+6^2) \\ &= (2\cdot\frac{1}{2}+3\cdot\frac{2}{3})(4\cdot\frac{1}{4}+2^2) \end{aligned}$$

$$= \frac{21}{6} + \frac{96}{6} = \frac{117}{6} = \frac{39}{2}$$

$$= (\frac{4}{2}\cdot\frac{1}{2} + \frac{9}{3}\cdot\frac{2}{3})(\frac{16}{4}\cdot\frac{1}{4} + 4)$$

$$= (\frac{4}{4} + \frac{18}{9})(\frac{16}{16} + \frac{64}{16})$$

$$= (\frac{36+72}{36})(\frac{80}{16})$$

$$= (\frac{108}{36})(\frac{80}{16}) = (3)(5) = \boxed{15}$$

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Reduce de forma clara y correcta los sig. problemas.

$$1. -5a - 8a + a - 6a + 21a$$

$$= 13a$$

$$2. -\frac{2}{5}bx^2 + \frac{1}{5}bx^2 + \frac{3}{4}bx^2 - 4bx + bx^2$$

$$= \frac{1}{5} + \frac{3}{4} = \frac{4}{20} + \frac{15}{20} = \frac{19}{20}$$

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

$$bx = -4bx + bx = -3bx$$

$$= \frac{19}{20}bx^2 - \frac{22}{5}bx^2 = \frac{19}{20}bx^2 - \frac{88}{20}bx^2$$

$$= -69bx^2 - 3bx$$

$$3. -\frac{2}{3}Y + \frac{1}{3}Y - Y$$

$$= Y - Y$$

$$= 0$$

$$4. -24ax + 2 - 15ax + 2 + 39ax + 2$$

$$+ = 39ax$$

$$- = -24ax - 15ax = -39ax$$

$$\text{enteros} = 2 + 2 + 2$$

$$= \cancel{39ax} - \cancel{39ax}$$

$$= 2 + 2 + 2$$

$$= 6$$