

# Módulo 9 Primeiro Medio

$$1) \quad \overbrace{3m} - \overbrace{fm} + \overbrace{5m} - \overbrace{fm} + \overbrace{3m} - \overbrace{8p} - \overbrace{5m} + \overbrace{8p}$$
$$\boxed{6m - 2m}$$

$$2) \quad \overbrace{x} - \overbrace{5y} + 8 + \overbrace{7x} - \overbrace{3y}$$

$$8x - 8y + 8 = \boxed{8(x - y + 1)}$$

$$3) \quad 3\frac{1}{2}a - 5b + 7\frac{1}{3}c - 2\frac{1}{3}a - 4\frac{1}{2}b + \frac{1}{6}c - 6\frac{1}{2}c + \frac{1}{4}a + 8b$$

$$\overbrace{\frac{7}{2}a} - \overbrace{5b} + \overbrace{\frac{22}{3}c} - \overbrace{\frac{7}{3}a} - \overbrace{\frac{9}{2}b} + \overbrace{\frac{1}{6}c} - \overbrace{\frac{13}{2}c} + \overbrace{\frac{5}{4}a} + \overbrace{8b}$$

$$\left(\frac{7}{2} - \frac{7}{3} + \frac{5}{4}\right)a + \left(-5 - \frac{9}{2} + 8\right)b + \left(\frac{22}{3} + \frac{1}{6} - \frac{13}{2}\right)c$$

$$\left(\frac{42}{12} - \frac{28}{12} + \frac{15}{12}\right)a + \left(-\frac{10}{2} - \frac{9}{2} + \frac{16}{2}\right)b + \left(\frac{44}{6} + \frac{1}{6} - \frac{39}{6}\right)c$$

$$\frac{29}{12}a - \frac{3}{2}b + \frac{6}{6}c = \boxed{2\frac{5}{12}a - \frac{1}{2}b + 1c}$$

$$5) \quad \overbrace{0,75x} - \overbrace{0,6y} + \overbrace{\frac{1}{2}y} + \overbrace{\frac{1}{2}x} - \overbrace{y}$$

$$0,75x - 0,6y + 0,5y + 1,5x - y$$

$$(0,75 + 1,5)x + (0,6 + 0,5 - 1)y$$

$$\boxed{2,25x + 0,1y}$$

$$\boxed{2\frac{1}{4}x + \frac{1}{10}y}$$

$$4) \quad \underbrace{12xy} - \underbrace{4x^2y} + \underbrace{6xy^2} - \underbrace{4x^2y} + \underbrace{3xy} + \underbrace{8xy^2} - yx^3 - x^2y^2$$

$$\underline{15xy + 14xy^2 - yx^3 - x^2y^2}$$

$$6) \quad 8\frac{1}{3}a - 6,35b - 5,7a - 2\frac{2}{12}b + 1\frac{1}{6}a + 7\frac{1}{3}b$$

$$\frac{25}{3}a - \frac{635}{100}b - \frac{57}{10}a - \frac{26}{12}b + \frac{7}{6}a + \frac{22}{3}b$$

$$\left(\frac{25}{3} - \frac{57}{10} + \frac{7}{6}\right)a + \left(-\frac{635}{100} - \frac{26}{12} + \frac{22}{3}\right)b$$

$$\left(\frac{250}{30} - \frac{171}{30} + \frac{35}{30}\right)a + \left(-\frac{1905}{300} - \frac{650}{300} + \frac{2200}{300}\right)b$$

$$\frac{114}{30}a - \frac{355}{300}b$$

$$\underline{\frac{19}{5}a - \frac{71}{60}b}$$

$$\begin{array}{r} 3-10-6 \mid 3 \\ 1 \ 10 \ 2 \ 2 \\ \hline 5 \ 15 \ 30 \\ 1 \end{array}$$

$$\begin{array}{r} 100-12-3 \mid 3 \\ 100 \ 4 \ 1 \ 2 \\ \hline 50 \ 2 \ 12 \\ 25 \ 1 \ 5 \\ 5 \end{array}$$

$$7) \quad \underbrace{32x} + \underbrace{17y} + \underbrace{14z} - 21w - \underbrace{0,86x} - \underbrace{\frac{1}{17}y} - \underbrace{\frac{3}{4}z}$$

$$(32 - 0,86)x + \left(17 - \frac{1}{17}\right)y + \left(14 - \frac{3}{4}\right)z - 21w$$

$$\underline{31,14x + \frac{288}{17}y + \frac{53}{4}z - 21w}$$