

Simplify

$$(5x^3 + 9x - 6) + (4x^2 - 3x + 10)$$

$$5x^3 + 4x^2 + 6x + 4$$


Simplify

$$(9x^2 - 9x + 2) - (2x^2 - 6x - 8)$$

$$9x^2 - 9x + 2 - 2x^2 + 6x + 8$$

$$7x^2 - 3x + 10$$

Simplify


$$(6x^3 - 5x^2 + x - 2) - (4x^3 - 9x^2 + x + 9)$$

$$2x^3 + 4x^2 - 11$$

Use exponent rules to simplify with only positive exponents.

$$5^5 \cdot 5^3 =$$

 ~~$5x^8$~~  $5^8$

Use exponent rules to simplify with only positive exponents.

$$x^5 \cdot x^4 =$$

*Handwritten red notes:*  $x^9$  (with a slash through it),  $x^5 + x^4$

$$x^9$$

Use exponent rules to simplify with only positive exponents.

$$m^7 \cdot m \cdot m^{-3} =$$

$$m^5$$

Use exponent rules to simplify with only positive exponents.

$$(p^{11}m^5)(p^8m) =$$

$$p^{19}m^6$$

Use exponent rules to simplify with only positive exponents.

$$5x^8 \cdot 4x^6 =$$

$$20x^{14}$$

Use exponent rules to simplify with only positive exponents.

$$3x^6p^5 \cdot 9x^3p^7 =$$

$$27x^9p^{12}$$

Use exponent rules to simplify with only positive exponents.

$$(7a^4b^3)(2a^7b^{12}) =$$

$$14a^{11}b^{15}$$

Use exponent rules to simplify with only positive exponents.

$$\frac{p^3 n^2}{pn^7} =$$

$$\frac{p^2}{n^5}$$

Use exponent rules to simplify with only positive exponents.

$$\frac{d^9 p^8 x^2 w^2}{d^9 p^2 x^{12} w^4} =$$

$$= \frac{p^6}{x^{10} w^2}$$

Use exponent rules to simplify with only positive exponents.

$$\frac{6x^4p^2}{18x^2p^3} = \frac{x^2}{3p}$$

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

Use exponent rules to simplify with only positive exponents.

$$-\frac{4w^7p^4}{16w^3p^3} =$$

$$= \frac{-w^4p}{4}$$

Use exponent rules to simplify with only positive exponents.

$$x^0 =$$

$$= 1$$

Use exponent rules to simplify with only positive exponents.

$$2^{-3} =$$

$$= \frac{1}{8}$$



Use exponent rules to simplify with only positive exponents.

$$x^{-8}n^2y^0w^{-6}p^{-5} =$$

$$= \frac{n^2}{x^8 w^6 p^5}$$

Use exponent rules to simplify with only positive exponents.

$$\frac{6x^{-5}p^{-4}}{3m^8} =$$

$$= \frac{2}{x^5 p^4 m^8}$$

Use exponent rules to simplify with only positive exponents.

$$\frac{7x^{-7}y^4}{14x^4y} =$$

$$= \frac{y^3}{2x^{11}}$$

Use exponent rules to simplify with only positive exponents.

$$(3n^3)^3 = 3^3 n^9$$

$$= 27n^9$$

Use exponent rules to simplify with only positive exponents.

$$(-2p^3)^4 =$$

$$= 16p^{12}$$

Use exponent rules to simplify with only positive exponents.

$$(x^{-4}m^2y^{-3}p^4)^2 =$$

$$= x^{-8}m^4y^{-6}p^8$$

$$= \frac{m^4p^8}{x^8y^6}$$

Use exponent rules to simplify with only positive exponents.

$$\left(\frac{x^5}{w^2}\right)^3 =$$

$$= \frac{x^{15}}{w^6}$$

Use exponent rules to simplify with only positive exponents.

$$\left(\frac{2w^9}{3k^7}\right)^4 =$$

$$= \frac{16w^{36}}{81k^{28}}$$

Use exponent rules to simplify with only positive exponents.

$$\left(\frac{8x^6m^4w^3}{4x^4m^4w^6}\right)^2 =$$

$$= \left(\frac{2x^2}{w^3}\right)^2$$
$$= \frac{4x^4}{w^6}$$

Use exponent rules to simplify with only positive exponents.

$$(4x^7y^5)^3 \cdot (8xy^5)^2$$

$$= 64x^{21}y^{15} \cdot 64x^2y^{10}$$
$$= 4096x^{23}y^{25}$$

Use exponent rules to simplify with only positive exponents.

$$\frac{-10x^{-4}m^3p^{-2}}{2xw^2m^5} \cdot \frac{3xm^7w^3}{8p^5m^6} =$$

$$= \frac{-5}{x^5 w^2 p^2 m^2} \cdot \frac{3xm^7w^3}{8p^5}$$

$$= \frac{-15w}{8x^4 p^7 m}$$

Use exponent rules to simplify with only positive exponents.

$$\left(\frac{xy^2}{6x^4y}\right)^3 \cdot \left(\frac{3x^5y}{xy^6}\right)^4 =$$

$$= \left(\frac{x}{6x^3}\right)^3 \cdot \left(\frac{3x^4}{y^5}\right)^4$$

$$= \frac{y^3}{6^3 x^9} \cdot \frac{81x^{16}}{y^{20}}$$

$$\frac{3 \cdot 3 \cdot 3 \cdot 3}{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2}$$

$$= \frac{3x^7}{8y^{17}}$$

$$\left(\frac{xy^2}{6x^4y}\right)^3 \cdot \left(\frac{3x^5y}{xy^6}\right)^4 =$$

$$\left(\frac{y}{6x^3}\right)^3 \cdot \left(\frac{3x^4}{y^5}\right)^4$$

$$\left(\frac{xy^2}{6x^4y}\right)^3 \cdot \left(\frac{3x^5y}{xy^6}\right)^4 =$$

$$\frac{x^3 y^6}{216 x^{12} y^3}$$

