



Ekspontenttilausekkeiden yksinkertaistaminen (2
muuttujaa)

Nimi: _____

Päivämäärä: _____ Pisteet: _____

$$\frac{6x^4 \times y^3(x^2 \times y^2)^2}{9 \times y^2(x^{-2})^{(-2)}}$$

$$5 \times y^3x^5(x^{(-3)})^4x^{(-3)}(y^4)^2$$

$$\frac{8x^{(-1)} \times y^{(-2)}(x^{(-1)} \times y^{(-1)})^{(-2)}}{5 \times y^3(x^2)^4}$$

$$\frac{8x^{(-4)} \times y^5(x^{(-1)} \times y^{(-1)})^{(-2)}}{6 \times y^{(-1)}(x^{(-1)})^3}$$

$$8x^4 \times y^4(x^{(-2)} \times y^3)^5$$

$$\frac{9x^6 \times y^5(x^3 \times y^3)^3}{6 \times y^{(-1)}(x^3)^3}$$

$$8x^{(-5)} \times y^{(-5)}(x^4 \times y^{(-3)})^{(-2)}$$

$$2 \times y^{(-1)}x^{(-4)}(x^2)^4x^{(-1)}(y^{(-3)})^{(-1)}$$

$$4 \times y^{(-2)}x^6(x^4)^{(-3)}x^{(-2)}(y^3)^{(-2)}$$

$$9 \times y^3x^6(x^2)^3x^{(-3)}(y^3)^3$$



Nimi: _____

Päivämäärä: _____ Pisteet: _____

$$\frac{6x^4 \times y^3(x^2 \times y^2)^2}{9 \times y^2(x^{-2})^{(-2)}} \\ \frac{2}{3}x^4y^5$$

$$5 \times y^3x^5(x^{(-3)})^4x^{(-3)}(y^4)^2 \\ \frac{5y^{11}}{x^{10}}$$

$$\frac{8x^{(-1)} \times y^{(-2)}(x^{(-1)} \times y^{(-1)})^{(-2)}}{5 \times y^3(x^2)^4} \\ \frac{8}{5x^7y^3}$$

$$\frac{8x^{(-4)} \times y^5(x^{(-1)} \times y^{(-1)})^{(-2)}}{6 \times y^{(-1)}(x^{(-1)})^3} \\ \frac{4}{3}xy^8$$

$$8x^4 \times y^4(x^{(-2)} \times y^3)^5 \\ \frac{8y^{19}}{x^6}$$

$$\frac{9x^6 \times y^5(x^3 \times y^3)^3}{6 \times y^{(-1)}(x^3)^3} \\ \frac{3}{2}x^6y^{15}$$

$$8x^{(-5)} \times y^{(-5)}(x^4 \times y^{(-3)})^{(-2)} \\ \frac{8y}{x^{13}}$$

$$2 \times y^{(-1)}x^{(-4)}(x^2)^4x^{(-1)}(y^{(-3)})^{(-1)} \\ 2x^3y^2$$

$$4 \times y^{(-2)}x^6(x^4)^{(-3)}x^{(-2)}(y^3)^{(-2)} \\ \frac{4}{x^8y^8}$$

$$9 \times y^3x^6(x^2)^3x^{(-3)}(y^3)^3 \\ 9x^9y^{12}$$