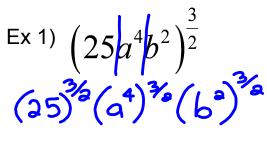
Exponent Laws - Tougher



 $(\sqrt{25})^3 \alpha^{\frac{12}{2}} b^{\frac{4}{2}}$

$$5^{3} a^{6} b^{3}$$

Distribute the power to everything inside the brackets.

Apply power of a power rule (multiply each pair of exponents)

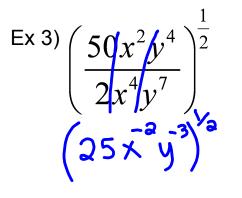
Use bottom out rule to simplify radical and simplify exponents on variables.

Ex 2)
$$\frac{6x^4y^{-3}}{14xy^2}$$

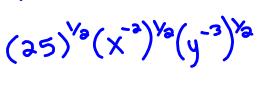
 $\frac{3}{7} \times 3y^{-5}$

<u>3x³</u> 7y⁵ Divide each pair. Simplify coefficient and subtract exponents for variables.

Take reciprocal of negative exponents to make all exponents positive.



J25 X Y

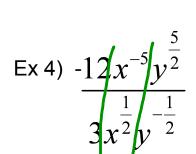


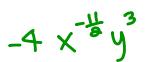
Divide each pair first. Subtract exponents on variables.

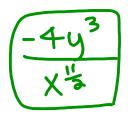
Distribute the power to everything inside the brackets.

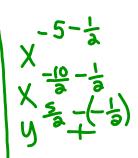
Apply power of a power rule (multiply each each of exponents)

Use bottom out rule to simplify radical and take reciprocal of exponents to make them positive.









Divide each pair. Subtract exponents for each variable.

Take reciprocal of exponents to make them positive. Do not move negative coefficients. Only exponents.