Name $\qquad$ EMPLID $\qquad$ Date Fractional Exponents \& Radicals

Watch this video from YouTube: https://youtu.be/trmMz2kzLrl
Upload your work to Dropbox using lastnamefirstinitialassignment03.pdf. This is due on Tuesday 9/21, at 10am.

1) In this example, what is " $y$ " called? What is " $x^{a}$ " called?

$$
\sqrt[y]{x^{a}}
$$

2) Simplify $-6 \sqrt{54}$. Show all work.
3) Evaluate: $16^{\frac{5}{4}}$
4) Simplify: $\sqrt{72 x^{14} y^{9}}$
5) Finish the quote from the video: "Society is never gonna make any progress until
