**Fractional and Negative Indices Homework**

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| **Literacy**Index (Power) | **Research**What is a logarithm?How would you find the value of $log\_{10}100$ and $log\_{2}8 $? | **https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcTxIgq5tPVMsy-t-OXRw_-BOw4onWieBq6GmnMlWVIiEkoBVO7-lQMemory**Learn these rules:$a^{-b}=\frac{1}{a^{b}}$Tip: The root is found in the denominator, like in a tree - the root is at the bottom.$a^{\frac{c}{d}}=\sqrt[d]{a^{c}}$  |
| **Skills**

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| Find the value of: |  |
| 1. $25^{\frac{1}{2}}$
 | 1. $6^{-2}$
 |
| 1. $9^{-1}$
 | 1. $8^{\frac{1}{3}}$
 |
| 1. $5^{-3}$
 | 1. $49^{-\frac{1}{2}}$
 |
| 1. $32^{\frac{2}{5}}$
 | 1. $144^{0.5}$
 |
| 1. $\left(\frac{1}{8}\right)^{-2}$
 | 1. $\left(\frac{3}{4}\right)^{-3}$
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 | **Stretch**Put these numbers in ascending order$$8^{\frac{1}{2}}       4^{\frac{2}{3}}     32^{\frac{1}{3}}     2^{\frac{5}{6}}$$ |