| a) Evaluate: | $64^{\frac{2}{3}}$ |  | b) Evaluate: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Can you re-write the power as a unit fraction multiplied by an integer? | $\begin{aligned} & 64^{\frac{1}{3} \times 2} \\ = & \left(64^{\frac{1}{3}}\right)^{2} \end{aligned}$ |  | Can you re-write the power as a unit fraction multiplied by an integer? | $\begin{aligned} & 64^{\frac{1}{2} \times 3} \\ = & \left(64^{\frac{1}{2}}\right)^{3} \end{aligned}$ |
|  | Can you write the fractional power as a radical? | $(\sqrt[3]{64})^{2}$ |  | Can you write the fractional power as a radical? | $(\sqrt[2]{64})^{3}$ |
|  | What is the value of the expression? | $(4)^{2}=16$ |  | What is the value of the expression? |  |
| c) Evaluate: | $32^{\frac{3}{5}}$ |  | d) Evaluate: | $10,000^{\frac{3}{4}}$ |  |
|  | Can you re-write the power as a unit fraction multiplied by an integer? | $\begin{aligned} & 32^{\frac{1}{5} \times 3} \\ = & \left(32^{\frac{1}{5}}\right)^{3} \end{aligned}$ |  |  |  |
|  | Can you write the fractional power as a radical? |  |  |  |  |
|  | What is the value of the expression? |  |  |  |  |

