

True or False?

**Fractional and Negative Indices**

For each statement, circle the correct response.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | $$\sqrt{100}=100^{^{1}/\_{2}}$$ | True | False |  | **8** | $$\frac{1}{\sqrt[3]{125}}=125^{^{-1}/\_{3}}$$ | True | False |
|  |  |  |  |  |  |  |  |  |
| **2** | $$\sqrt[3]{27}=3^{^{1}/\_{3}}$$ | True | False |  | **9** | $$10^{-2}=\frac{1}{100}$$ | True | False |
|  |  |  |  |  |  |  |  |  |
| **3** | $$25^{^{1}/\_{2}}=5$$ | True | False |  | **10** | $$\left(\frac{1}{9}\right)^{^{1}/\_{2}}=3$$ | True | False |
|  |  |  |  |  |  |  |  |  |
| **4** | $$8^{^{1}/\_{3}}=2$$ | True | False |  | **11** | $$\sqrt[3]{\frac{1000}{27}}=\left(\frac{1000}{27}\right)^{^{1}/\_{3}}$$ | True | False |
|  |  |  |  |  |  |  |  |  |
| **5** | $$2^{-1}=-2$$ | True | False |  | **12** | $$\frac{5}{6}=\left(\frac{36}{25}\right)^{^{-1}/\_{2}}$$ | True | False |
|  |  |  |  |  |  |  |  |  |
| **6** | $$(-64)^{^{1}/\_{3}}=4$$ | True | False |  | **13** | $$\left(\frac{64}{27}\right)^{^{-1}/\_{3}}=\frac{3}{8}$$ | True | False |
|  |  |  |  |  |  |  |  |  |
| **7** | $$5^{-2}=\frac{1}{5^{2}}$$ | True | False |  | **14** | $$\left(\frac{125}{8}\right)^{^{1}/\_{3}}=\left(\frac{4}{25}\right)^{^{-1}/\_{2}}$$ | True | False |