## Rational Exponent Block

| Simplify. $8^{2 / 3}$ | Simplify. $8^{1 / 3}$ | Simplify. $8^{-1}$ | Simplify. $9^{1 / 2}$ |
| :---: | :---: | :---: | :---: |
| Simplify. $(-2)^{3}$ | Simplify. $(-2)^{-3}$ | Simplify. $64^{1 / 2}$ | Simplify. $64^{1 / 3}$ |
| Simplify. $64^{-1 / 2}$ | Simplify. $64^{-1 / 3}$ | Simplify. $\left(\frac{1}{4}\right)^{1 / 2}$ | Simplify. $\left(\frac{1}{4}\right)^{3 / 2}$ |
| Simplify. $64^{2 / 3}$ | Simplify. $\left(\frac{4}{9}\right)^{1 / 2}$ | Simplify. $\left(\frac{4}{9}\right)^{3 / 2}$ | Simplify. $\left(\frac{4}{9}\right)^{-2}$ |
| Simplify. $9^{-3 / 2}$ | Simplify. $9^{-1 / 2}$ | Simplify. $9^{-2}$ | Simplify. $(-9)^{-2}$ |
| Simplify. $25^{3 / 2}$ | Simplify. $25^{-1 / 2}$ | Simplify. $25^{-1}$ | Simplify. $(-27)^{1 / 3}$ |
| Simplify. $9^{3 / 2}$ | Simplify. $(-8)^{2 / 3}$ | Simplify. $\left(\frac{4}{9}\right)^{-1 / 2}$ | Simplify. $\left(\frac{1}{4}\right)^{-2}$ |
| Simplify. $8^{-1 / 3}$ | Simplify. $8^{-2 / 3}$ | Simplify. $\left(\frac{1}{9}\right)^{-1 / 2}$ | Simplify. $\left(\frac{1}{9}\right)^{-2}$ |
| Simplify. $\left(\frac{1}{4}\right)^{-1 / 2}$ | Simplify. $\left(\frac{1}{8}\right)^{-1 / 3}$ | Simplify. $(-27)^{2 / 3}$ | Simplify. $(-27)^{-1 / 3}$ |


| 3 | $\frac{1}{8}$ | 2 | 4 |
| :---: | :---: | :---: | :---: |
| 4 | 8 | $-\frac{1}{8}$ | -8 |
| $\frac{1}{8}$ | $\frac{1}{2}$ | $\frac{1}{4}$ | $\frac{1}{8}$ |
| $\frac{81}{16}$ | $\frac{8}{27}$ | $\frac{2}{3}$ | 16 |
| $\frac{1}{81}$ | $\frac{1}{81}$ | $\frac{1}{3}$ | $\frac{1}{27}$ |
| -3 | $\frac{1}{25}$ | $\frac{1}{5}$ | 125 |
| 16 | $\frac{3}{2}$ | 4 | 27 |
| 81 | 3 | $\frac{1}{4}$ | $\frac{1}{2}$ |
| $-\frac{1}{3}$ | 9 | 2 | 2 |

