## Exercise 3

(a) Using exponential notation, we can write $\sqrt[3]{5}$ as $\qquad$ .
(b) Using radicals, we can write $5^{1 / 2}$ as $\qquad$ .
(c) Is there a difference between $\sqrt{5^{2}}$ and $(\sqrt{5})^{2}$ ? Explain.

## Solution

Using exponential notation, we can write $\sqrt[3]{5}$ as $5^{1 / 3}$.
Using radicals, we can write $5^{1 / 2}$ as $\sqrt{5}$.
There is no difference between $\sqrt{5^{2}}$ and $(\sqrt{5})^{2}$ because they both evaluate to 5 .

