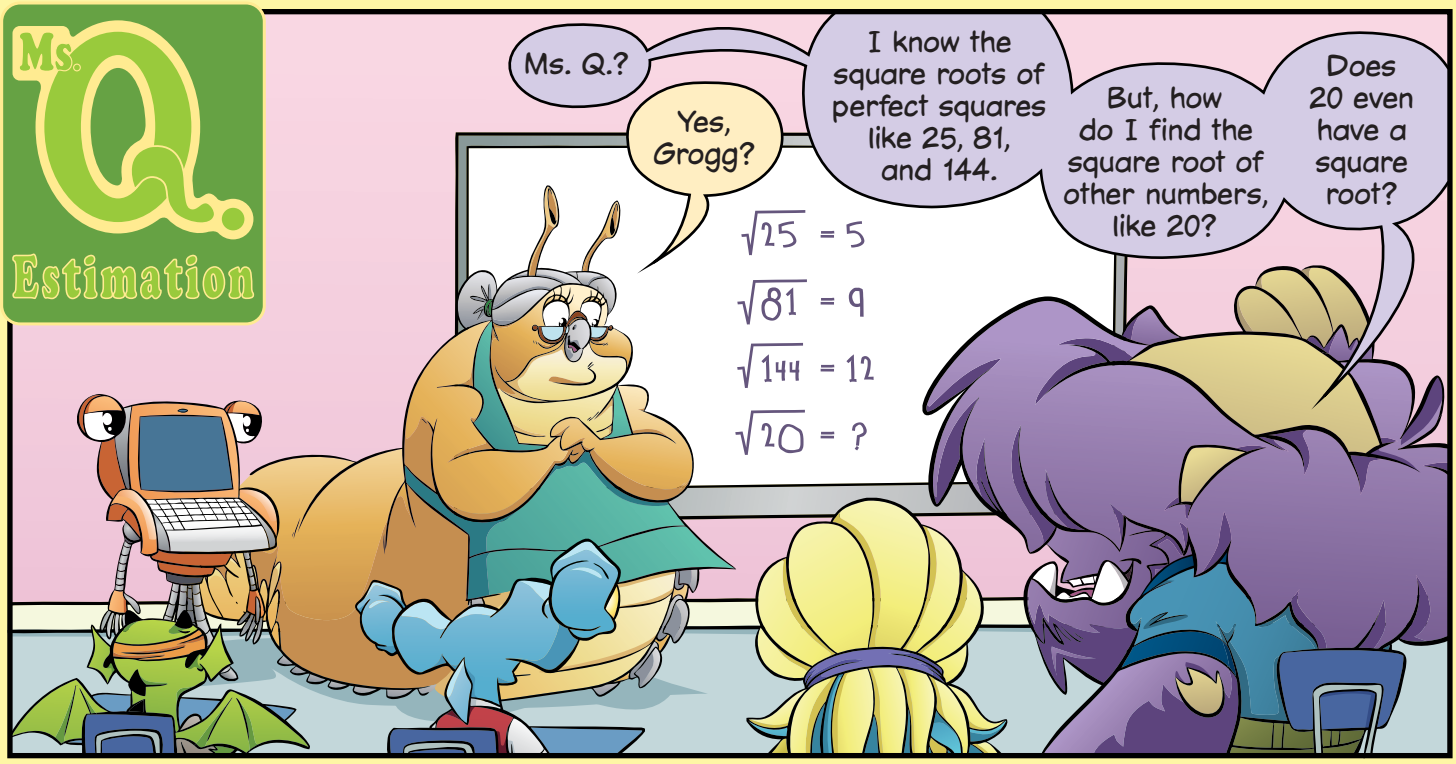
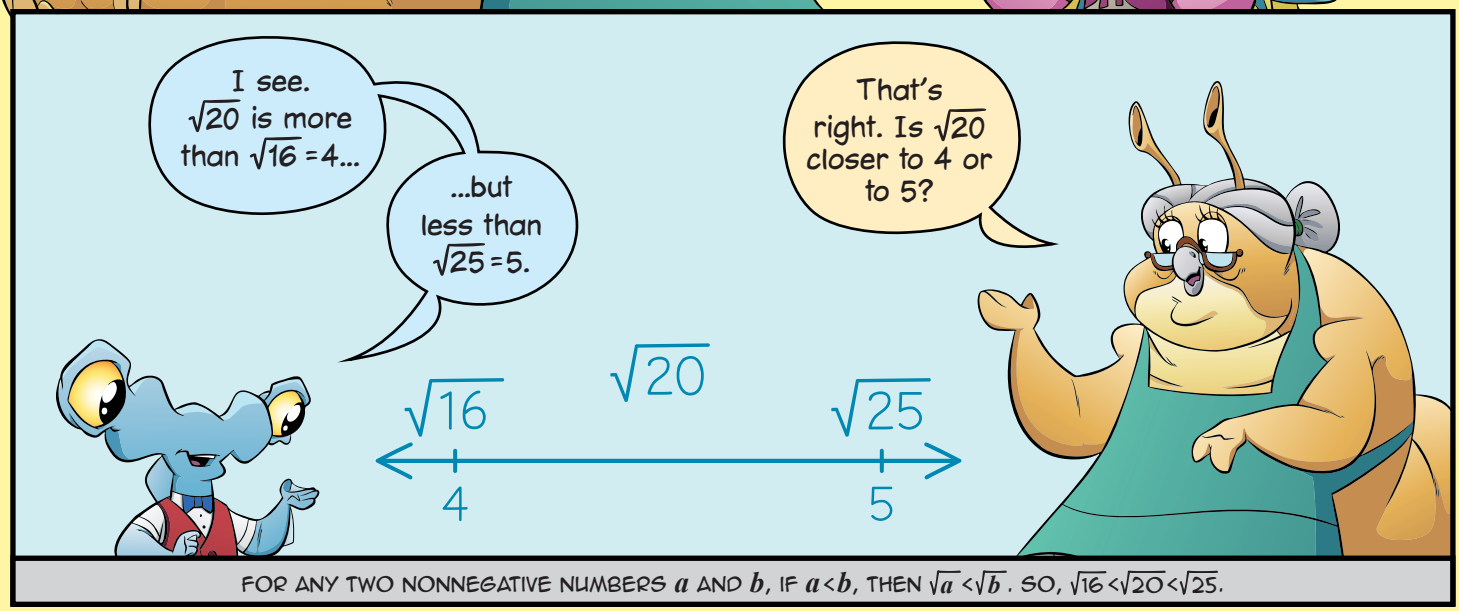
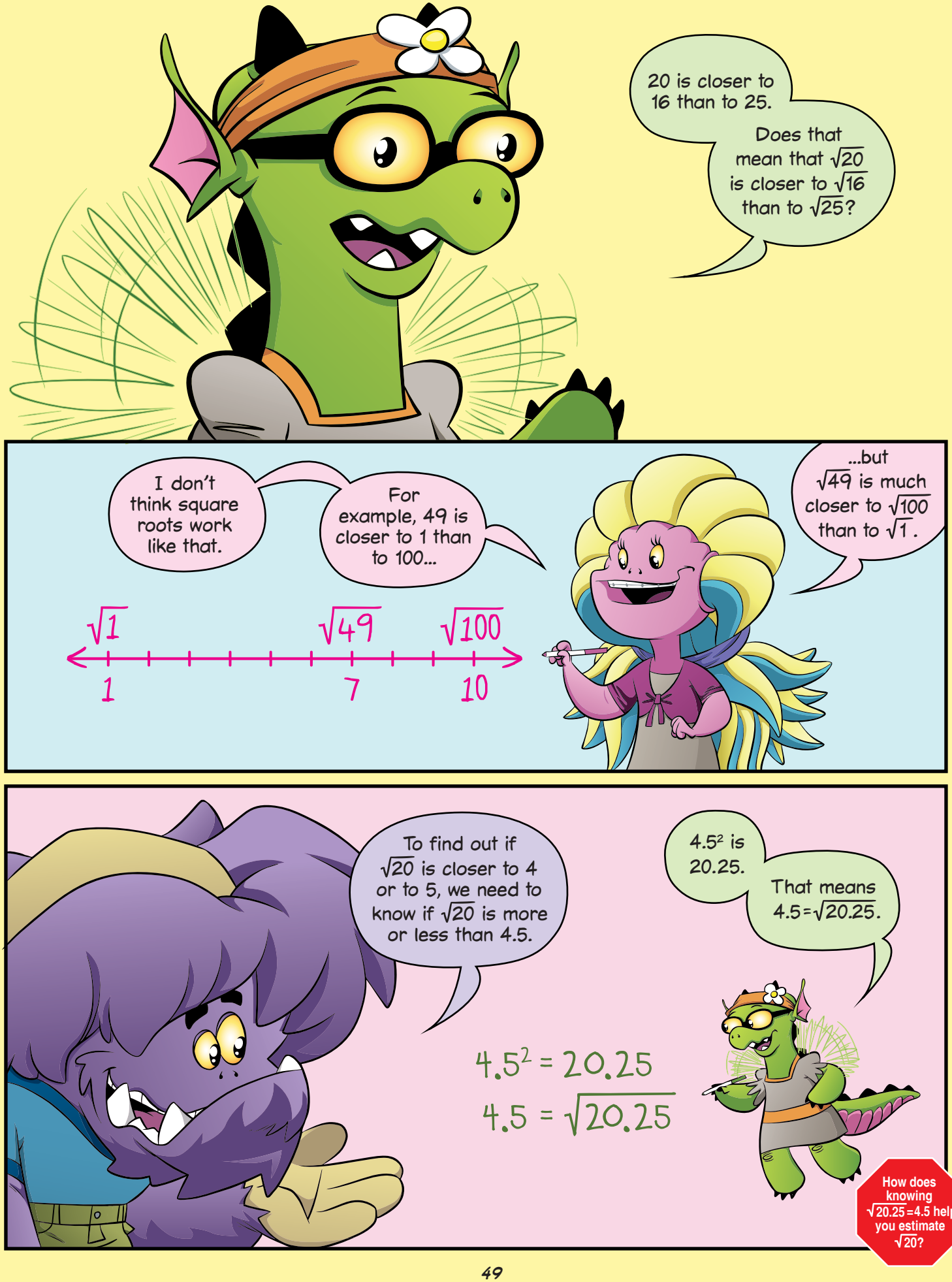
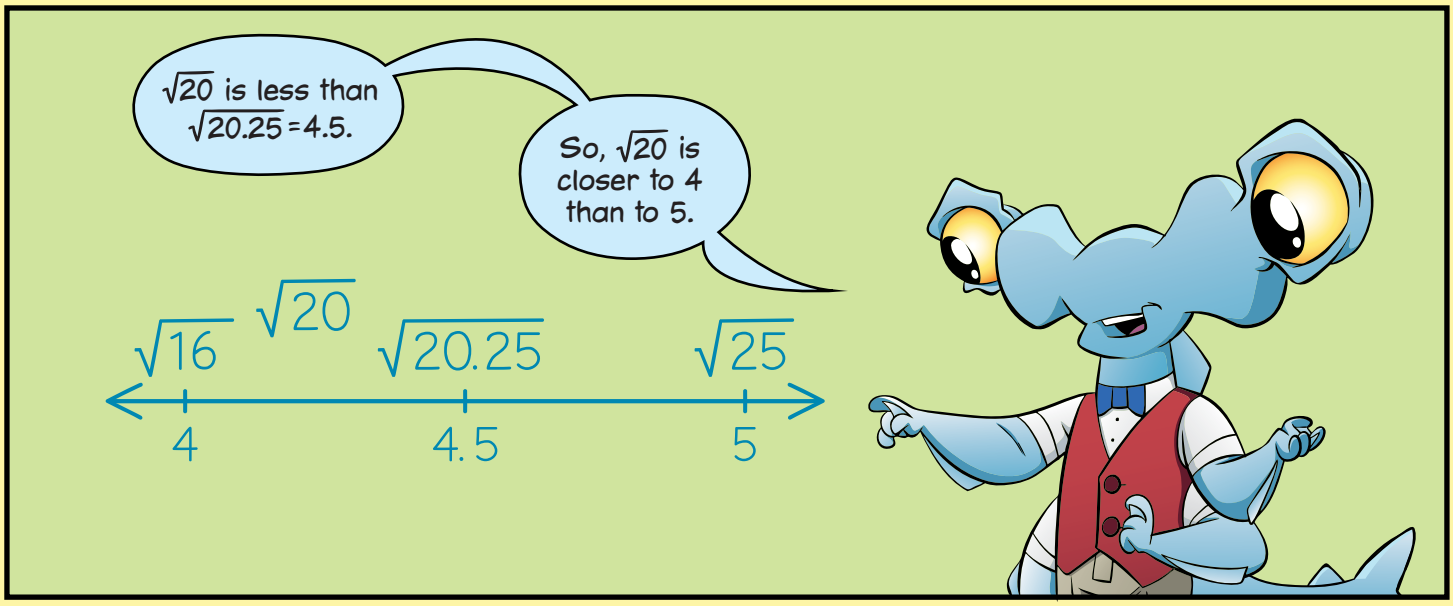
Ms. Q. Estimation

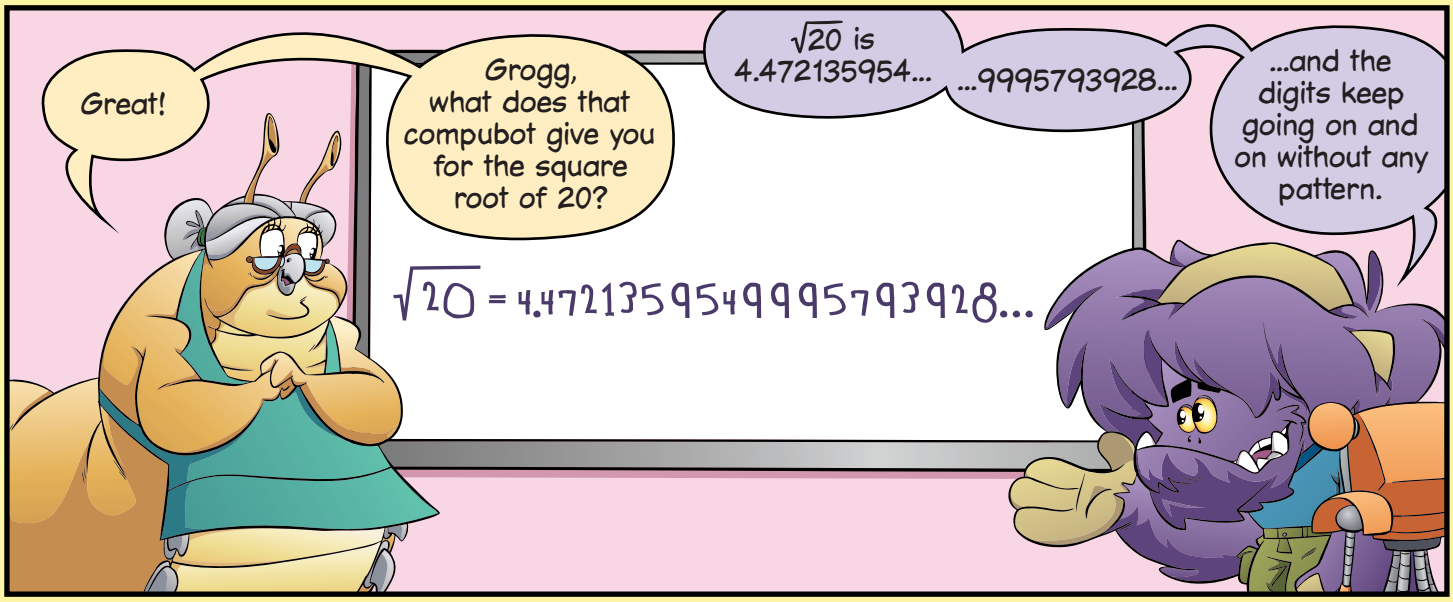


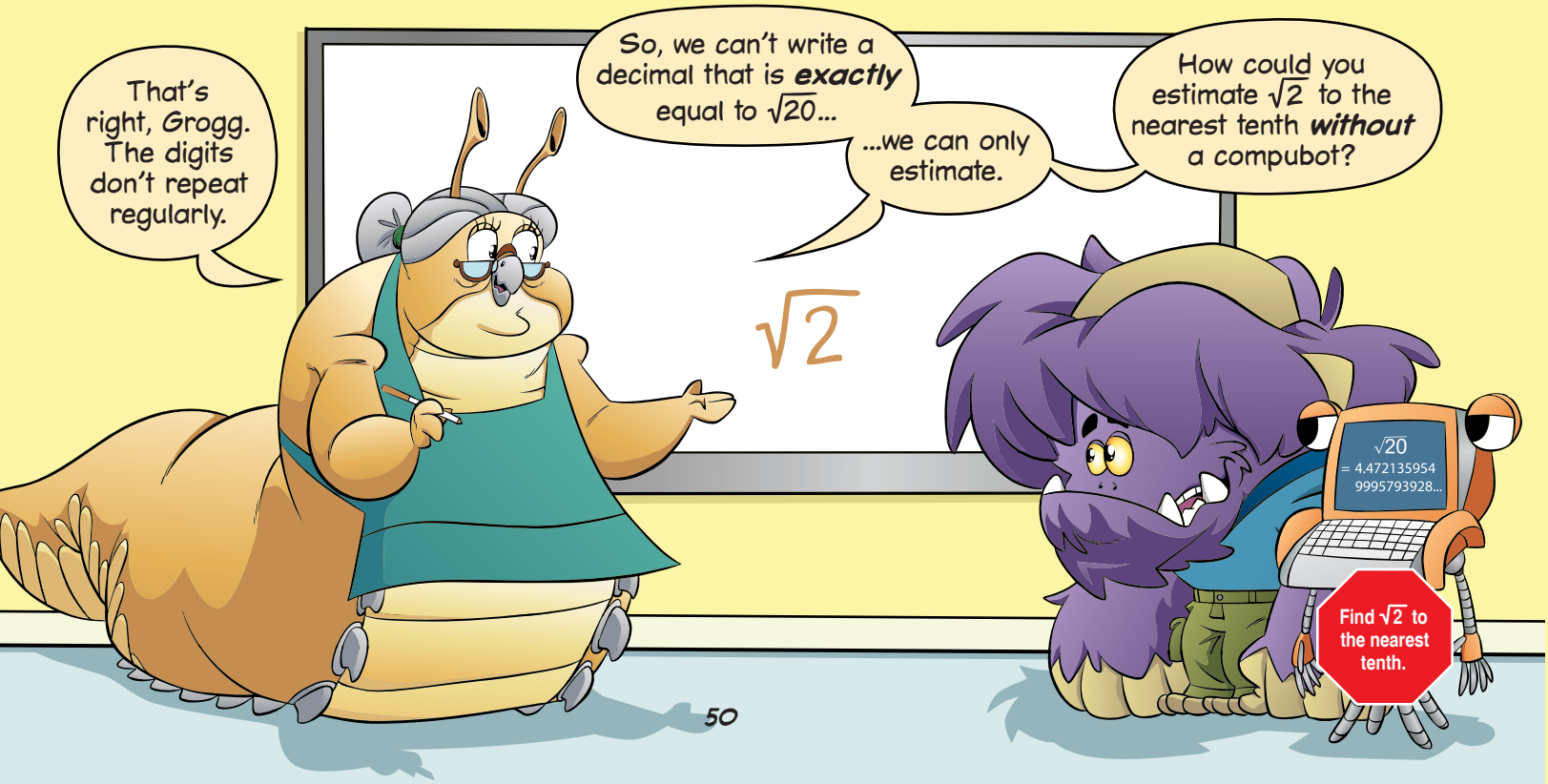


FOR ANY TWO NONNEGATIVE NUMBERS a AND b, IF $a<b$, THEN $\sqrt{a}<\sqrt{b}$. SO, $\sqrt{16}<\sqrt{20}<\sqrt{25}$.




√20 is less than √20.25 = 4.5.
So, √20 is closer to 4 than to 5.
√16
√20
√20.25
√25
4
4.5
5


Great!
Grogg, what does that compubot give you for the square root of 20?
√20 is 4.472135954...
...9995793928...
...and the digits keep going on and on without any pattern.
√20 = 4.472135954999579393 28...


That's right, Grogg. The digits don't repeat regularly.
So, we can't write a decimal that is exactly equal to √20...
...we can only estimate.
How could you estimate √2 to the nearest tenth without a compubot?
√2
√20 = 4.472135954 9995793928...
Find √2 to the nearest tenth.