Comparing Decimals
Video Script

Scene		Full Transcript
1	**Zander:**	Hey, what's up? I'm at Limited Edition Comic, a comic shop near where I work to see what they've got in. Rob, the owner, has got a great following. He even ships a large number of Indie releases. Rob tracks how many pounds of comics he sends out each week but is struggling with a new scale he purchased. I suspect a review in representing and comparing decimals will do the trick and get another *Problem Solved*.
2	**Zander:**	Each week, Rob ships comics to customers based on preference: sci-fi, superheroes, action/adventure, you name it. He records the weight of each package. His scale weighs in tenths and hundredths. I am gonna show you, and Rob, three ways to understand decimals and to determine which week he ships the most comics.
3	**Voice-Over Zander:**	Rob's ledger says that, during week one, he shipped 20.4 (twenty and four-tenths) pounds and during week two he shipped 20.23 (twenty and twenty-three hundredths) pounds. Was more shipped in week one or two? Some people say 23 is bigger than four, so week two must be more, but that is incorrect thinking. Since both weeks are a little over 20 pounds. Let's compare the decimal portion of each number.
4	**Voice-Over Zander:**	First, we use an area model. This model represents 0.4 (four tenths) and this model, 0.23 (twenty-three hundredths). Just by comparing the areas we can see that 0.4 (four tenths) is larger than 0.23 (twenty-three hundredths).
5	**Voice-Over Zander:**	Another way to compare the two is by using fractions, so we have $\frac{4}{10}$ written in terms of a fraction and $\frac{23}{100}$ written as a fraction. To compare which is larger we need a common denominator. Since 100 is a multiple of 10, we need to change the $\frac{4}{10}$ to hundredths by multiplying the numerator and denominator by 10. We can see that $\frac{40}{100}$, which is equivalent to $\frac{4}{10}$, is larger than $\frac{23}{100}$. The third way is by looking at the numbers symbolically in terms of their place value. We always begin with the largest place value when comparing numbers. Both numbers have 2 tens and 0 ones. Now let's compare the tenths place. Four tenths is larger than two tenths. Twenty and four-tenths

		pounds are more than 20.23 (twenty and twenty-three hundredths) pounds.
6	**Zander:**	These three methods work when comparing decimals that have to do with time, speed, dosage, or temperature – not just fun stuff like comics! This stack should get me by until next week. I wonder, has anyone ever done a comic book on math? I know, they could start with a caper involving Comparing Decimals. Right? Yeah, yeah, and then the dashing hero could go from tricky math problem to math problem, saving the day, rescuing the girl. Oh, it'd be a best seller for sure! And we could call it, I know, *Problem Solved*.