CONVERT FRACTIONS TO DECIMALS
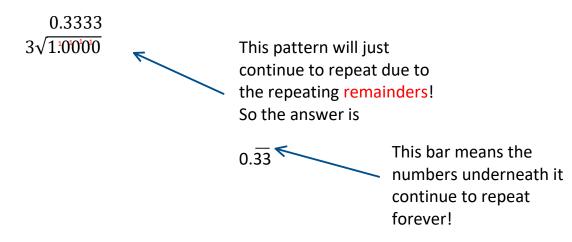
$Numerator\sqrt{Denominator}$

The Math Dugout

What is a fraction and what does it say?...

$$\frac{1}{3} = 1 \div 3 \dots$$

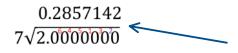and we can calculate this using long division (just make sure we put plenty of decimal places in)…

$$3\overline{\smash{)}1.0000} \quad 0.3333$$

This pattern will just continue to repeat due to the repeating remainders! So the answer is

$$0.\overline{33}$$

This bar means the numbers underneath it continue to repeat forever!

- So $\frac{1}{3}$ converted to a decimal is equal to $0.\overline{33}$

Let's try another!

Write $\frac{2}{7}$ as a decimal …

Can see this is the same as $2 \div 7$ … which we can calculate using long division!

$$7\overline{\smash{)}2.0000000} \quad 0.2857142$$

Get ourselves back to the 20 at the start… Therefore the "285714" will repeat forever!

- So $\frac{2}{7}$ converted to a decimal is $0.\overline{285714}$

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