Chapter 5 Dividing decimals

First you must make the divisor a whole number if it is not already a whole number.

Ex. 27 ÷ 0.9 you must move the decimal in 0.9 one place to the right to make it 9

Second you must move the decimal in the dividend the same number of places you moved the decimal in your divisor.

Ex. 27 ÷ 0.9 Since you move the decimal in 0.9 one place to the right you move the decimal in the dividend one place to the right. There is not a decimal written in 27 so the decimal is after the 7. After moving the decimal 1 place to the right the number is now 270.

3rd. After you move the decimal in the dividend bring it straight up into your quotient. Your problem is now 270 ÷ 9 and you divide regularly.

If there is not a decimal in your divisor just bring the decimal in the dividend straight up to the quotient and divide.

Bar notation is the line that is over the repeating numbers in your quotient.

Ex. $7 \div 9 = 0.\overline{7}$ $8 \div 11 = 0.\overline{72}$ $13 \div 6 = 2.1\overline{66}$

When dividing with decimals you may add zeroes to the dividend until there is a repeating pattern or you are finished dividing.