

Key Concept 1: Rounding

When we round a number we do **not** change it's place value

Key Concept 2: Multiplying by numbers with zeros

1. Ignore the zeros, multiply the numbers
2. Count the zeros, add them on

Key Concept 3: Estimation

- To **estimate**, we round the numbers to make the calculation **EASY** to do in our head. If you have to write it out to solve it, it is not an estimation
- We are finding an **approximate** answer
- Normally round numbers to 1 significant figure

Key Concept 4: Dividing by numbers with zeros

1. Cross off the **same number** of zeros in both numbers.
2. Divide
(Do not put the zeros back on!)

Key Concept 5: Adding and Subtracting Decimals

Line up the decimal points so that the place values are lined up

Key Concept 6: Multiplying by decimals

1. Ignore the decimal points, multiply the numbers
2. Count the number of decimal places in the question, count the same number in the answer

Key Concept 7: Dividing a decimal by a non-decimal

Divide, making sure to line up the decimal points
If there is still a remainder, add on zeros and keep dividing

Key Concept 8: Dividing by a decimal

1. Move the decimal point the **same number** of places in both numbers so that you are no longer dividing by a decimal.
2. Divide
(Do not move the decimal back)

Key Concept 9: Scientific Notation (Standard Form)

1. The decimal point goes after the first non-zero number
2. The power of ten tells how many places the decimal point has moved
positive = big number;
negative = small number