Year 10 Mathematics Learning Journey: Unit 15 – Indices and Roots

Step 7 (R): Standard form calculations

What is the same and what is different about adding / subtracting and multiplying / dividing standard form numbers without a calculator?
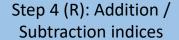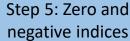
Step 6: Powers of powers

Evaluate $(6x^2)^3$

Step 5: Zero and negative indices

What is the value of a^0 for any value of a?

Step 3 (R): Standard Form

Why are the following not in standard form?
a) $8.5 \times 10^{0.5}$
b) 0.5×10^{-8}
c) 11×10^4

Step 4 (R): Addition / Subtraction indices

Why is $a^6 \div a = a^5$ when there is no index on the second term?

Step 2: Higher powers and roots

How do you use a calculator to find the 4th root of a number?

Step 1 (R): Square and Cube numbers

What is the difference between the square of a number and the square root of a number?