1. Simplify $2 + 3 \times 5 - 4$. Check if it matches with your neighbour's answer.

Moral of the story: Always use ________________

[Hint: ()]

2. Complete the next row by guessing a pattern:

\[
\begin{array}{cccccc}
1 & 1 & 1 & \ldots & (x+1)^1 \\
1 & 2 & 1 & \ldots & (x+1)^2 \\
1 & 3 & 3 & 1 & \ldots & (x+1)^3 \\
1 & 4 & 6 & 4 & 1 & \ldots & (x+1)^4 \\
1 & \square & \square & \square & \square & \square & \ldots & (x+1)^5 \\
\end{array}
\]

Patterns are useful!

3. \[ \sqrt{25^3} = \quad -\frac{1}{2} \]

\[ 25^{3/2} = \quad 25 \]

4. Is \( \frac{1}{x} - \frac{1}{y} = \frac{1}{x-y} \)?

[If not, give me a value for \( x \) and \( y \) which shows why this is false.]

5. Solve \( x^2 + 7x + 12 = 0 \). Did you use the quadratic formula? If not, try solving \( x^2 + 10x + 8 = 0 \).
6. \( \pi \text{ radians} = \ldots \text{ degrees} \)

7. Simplify \( \frac{x^2 - 9}{x - 3} \)

8. Simplify \( \frac{x\sqrt{x}}{5x} \)

9. Find the equation of the line \( L \)

10. Do you know \( e \)?

HW: Read up about \( e \) from the internet and come to class with one cool fact about \( e \)!

Choco-questions
* You get 2 chocolates if you can calculate \( 1 + 2 + 3 + \ldots + 1000 \) by hand (without a calculator).
* You get 1 chocolate if you can at least tell me the last digit of the answer!