

What's the limit of $x^2 + x + 1$ as x goes to 5?

1) You're given a polynomial. This means you can just replace x with 5 and evaluate.

$$2) \quad \lim_{x \rightarrow 5} x^2 + x + 1 = 5^2 + 5 + 1 = 25 + 5 + 1 = 30 + 1 = 31$$