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	Klasse: 20		Dato: 4. april 2023	Fag: Matematik A

Opgave 002

$$f(x) = 6x^2 + 2x$$

Integrer funktionen f

$$F(x) = \int f(x) dx$$

$$F(x) = \frac{6}{3}x^3 + \frac{2}{2}x^2 + C$$

$$F(x) = 2x^3 + x^2 + C$$

Bestem F sådan at $F(1)=8$

$$F(1) = 8$$

$$2(1)^3 + (1)^2 + C = 8$$

$$2 + 1 + C = 8$$

$$C = 8 - 2 - 1$$

$$C = 5$$

$$\underline{F(x) = 2x^3 + x^2 + 5}$$