

## 13D Definite Integrals

1. Find:  $\int_1^2 3x^2 dx$

2. Evaluate:  $\int_0^1 (x^{\frac{1}{3}} - 1)^2 dx$

3. Given that  $P$  is a constant and  $\int_1^5 (2Px + 7) dx = 4P^2$ , show that there are two possible values for  $P$ , and find what they are.