Exercise

1. Use the binomial theorem to expand $(2a + 3b)^3$.
2. Use the binomial theorem to expand $(x - \frac{1}{2})^3$.
3. Use the binomial theorem to find the 4th term in the expansion of $(a - b)^6$.
4. Use the binomial theorem to find the 3th term in the expansion of $(x - \frac{1}{2})^5$.

Answers to Exercise

(**1**) $8x^3 + 36a^2b + 54ab2 + 27b^3$
(**2**) $x^3 - \frac{3}{2}x^2 + \frac{3}{4}x - \frac{1}{8}$.
(**3**) $20a^3b^3$.
(**4**) $\frac{5}{2}x^3$.