# Expansion

## Binomials/Special/Cases

### Perfect Cubes

1. $expand \left( 2x + 5y \right)^3$

2. $expand \left( 4a - 2b \right)^3$

3. $expand \left( 6x + 8y \right)^3$

4. $expand \left( 3a - 9b \right)^3$

5. $expand \left( 7x + 9y \right)^3$

6. $expand \left( 2x + 7y \right)^3$

7. $expand \left( 4a - 3b \right)^3$

8. $expand \left( 9a - 10b \right)^3$

9. $expand \left( 3x + 10y \right)^3$

10. $expand \left( 8a - 3b \right)^3$

# Answers

## Expansion

### Binomials/Special/Cases

#### Perfect Cubes

1. $8x^3 + 60x^2y + 150xy^2 + 125y^3$

2. $64a^3 - 96a^2b + 48ab^2 - 8b^3$

3. $216x^3 + 864x^2y + 1152xy^2 + 512y^3$

4. $27a^3 - 243a^2b + 729ab^2 - 729b^3$

5. $343x^3 + 1323x^2y + 1701xy^2 + 729y^3$

6. $8x^3 + 84x^2y + 294xy^2 + 343y^3$

7. $64a^3 - 144a^2b + 108ab^2 - 27b^3$

8. $729a^3 - 2430a^2b + 2700ab^2 - 1000b^3$

9. $27x^3 + 270x^2y + 900xy^2 + 1000y^3$

10. $512a^3 - 576a^2b + 216ab^2 - 27b^3$