# LCOL Algebra 4 — Evaluating Expressions

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**ON THE LCOL PAST PAPERS · Examined in 7 question-parts, 2017–2025 (main sittings) | 2025: P1 Q10(c)(i) · 2024: P1 Q5(a), P1 Q10(c)(i) · 2023: P1 Q7(a)(i) · 2019: P1 Q8(a)(i) · 2018: P1 Q9(a)(i) · 2017: P1 Q9(e)(i)**

**How to use this sheet:** these are the exact questions worked in this tutorial, in order. Try each one yourself first — the time it is posed in the video is shown, so you can pause before Paul solves it. Final answers are at the back; the full method is in the video.

## Worked examples (in the video)

**Worked example.** x = −2 and y = 3 — evaluate $2x^2 + 6xy$ (swap the letters in, each in a bracket, then BIMDAS). *(worked 00:14–02:23)*.

## Questions

**Q1(a).** x = −6, y = −1: evaluate $3x^2 + 14y^2x$.

*Posed at 03:52 in the tutorial.*

**Q1(b).** x = −6, y = −1: evaluate $2x - 7y + 14$.

*Posed at 04:35 in the tutorial.*

**Q2(i).** a = −1, b = 3: evaluate $2a^3 - b^2$.

*Posed at 04:54 in the tutorial.*

**Q2(ii).** a = −1, b = 3: evaluate $2a - 7ab$.

*Posed at 05:20 in the tutorial.*

## Answers

*Final answers only — pause the video and check yourself; the worked method is in the tutorial.*

**Worked example.** $2(-2)^2 + 6(-2)(3) = 8 - 36 = -28$

**Q1(a).** $108 - 84 = 24$

**Q1(b).** $-12 + 7 + 14 = 9$

**Q2(i).** $-2 - 9 = -11$

**Q2(ii).** $-2 + 21 = 19$

## Overlaps with these tutorials

**LCOL Algebra 1 — Signs.** Subbing in negatives is all about the sign rules — brush those up first.

**LCOL Algebra 5 — Introduction to Equations.** Instead of being told what $x$ is, you work it out. Comes next.