

LCOL Algebra 22 — Manipulation Of Formula

LCOL · Algebra | Tutorial questions & answers | gktuition.ie

ON THE LCOL PAST PAPERS · Examined in 15 question-parts, 2016–2025 (main sittings)
| 2025: P1 Q10(c)(ii), P1 Q10(c)(iii) · 2024: P1 Q10(c)(ii) · 2023: P1 Q7(a)(ii), P1 Q7(a)(iii), P1 Q7(a)(iv), P1 Q10(c)(iii), P2 Q7(a)(ii) · 2019: P1 Q8(a)(ii) · 2018: P1 Q9(b)(i), P1 Q9(b)(ii) · 2017: P1 Q9(e)(ii), P1 Q9(e)(iii) · 2016: P1 Q1(b), P1 Q8(a)

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)

Example 1. Make x the subject of $3x^2 + 4 = y$ (strip one complication per line; square root last). (*worked 00:03–02:06*).

Example 2. Make y the subject of $\sqrt{(5y^2 - 3)/x} = k$ (square both sides first). (*worked 02:23–04:57*).

Questions

Q1. Make g the subject of $p = g + 2h$.

Posed at 05:38 in the tutorial.

Q2. Make t the subject of $s = bt + a$.

Posed at 06:18 in the tutorial.

Q3. Make t the subject of $s = \frac{at}{3}$.

Posed at 07:08 in the tutorial.

Answers

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

Example 1. $x = \sqrt{\frac{y-4}{3}}$

Example 2. $y = \sqrt{\frac{k^2x+3}{5}}$

Q1. $g = p - 2h$

Q2. $t = \frac{s-a}{b}$

Q3. $t = \frac{3s}{a}$

Overlaps with these tutorials

LCOL Algebra 5 — Introduction to Equations. Same do-the-opposite logic, here applied to a formula. Do that first.

LCOL Algebra 15 — The $-b$ Formula. Square and square root are opposites — the same undo-one-step-at-a-time idea you use when rearranging.