POLE MOUNTAIN LEARNING / FREE PRACTICE

Ropes Course Equations

Free algebra practice for grades 6–8. No online account is needed. No calculator is needed.

Start

Students sign in with the initials or code you give them (not their names): they type it the first time and tap it after that. They choose one of eight climbers and pick a grade. Questions ask students to interpret expressions, solve equations and reason about inequalities: choose answers, use menus and tables, move cards, type numbers and read supplied graphs.

Each trip is a new level: Ropes Course, Pine Canopy, Moab Canyon and Alpine (Climb again). A new trip appears after all five checkpoints are cleared and the bonus answer has been shown and closed. **Calm mode** reduces animation; **Read to me** reads questions aloud.

Feedback that leads to another try

Student response	What happens next
Correct answer	Clears the checkpoint. Checkpoint 5 has two parts, and Part A and Part B are kept separate.
First miss	A clue, then Try again on the SAME question.
Corrects with the clue	Cleared with support. The first answer stays in the record.
Misses again	Worked steps, then another question of the same kind with different numbers.

Ask: **What did the clue make you notice? Which step changed? What kind of question should I practice next?**

Results are optional

Open **My Course Notes > Results**. They show each first answer, what happened next and how each skill went. Use **Print / Save PDF** or **Save results file (CSV)** when needed. Results are saved in this browser on this device only and do not sync; anyone using the same browser can see them, so treat them as **practice notes, not grades**. Students can use **Change my name** or **Erase my results on this device**.

No devices? Use the paper trips. The *Student Trips* PDF for each grade has one printable trip per level, with the game's own pictures, checkpoints and questions. Trips 1–2 use the main questions; trips 3–4 practice the same kinds with new numbers. The *Teacher Guide and Key* PDF has the answers, the game's clue and worked steps for each question, common wrong answers and a class record sheet.

Purpose and feedback

Grade 6: expressions, one-step equations, simple strict inequalities. Grade 7: rational coefficients, multi-step equations, two-step inequalities, justifying steps. Grade 8: variables on both sides, one/none/infinitely many solutions, systems with supplied graphs. Each grade has 20 questions in 10 families, including supported retries. Students do not construct graphs in this version. Original practice informed by published mathematics expectations and public assessment resources. It is not an official Pearson, NAVVY or WY-TOPP assessment and does not use their test questions. Results do not predict test scores or establish competency. Built and reviewed with AI tools; no human classroom trial of this revision yet. Feedback: hello@polemountainlearning.com. Please omit student names and information.