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(57) Abstract :
The present invention discloses a real-time coordinate geometry trainer device comprising a tactile grid (100), input point sensors (101), line equation processor (102), rendering module (103), and display unit (104). The device computes and displays line equations dynamically upon user point plotting. It features audio-haptic feedback (106) and a multi-mode selector (107) for training in slopes, midpoints, and reflections. This interactive device enhances conceptual understanding, promotes self-learning, and supports inclusive education through real-time feedback and visual computation of coordinate geometry principles.

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