

Solutions

2.1 $b-a$ gives $2-4=-2$.

2.2 Half of $a_y=2$ is 1.

2.3 Half of $b_y-a_y=(6-2)/2=2$.

3.1 False. AB from (0,0) to (1,0) and CD from (0,1) to (2,1) are parallel, but A,B,C are not collinear. Collinearity requires a shared line, not merely parallel directions.

Local review guidance: show the chosen method; give the checked result; explain the condition or failed shortcut. This is authored classroom guidance.