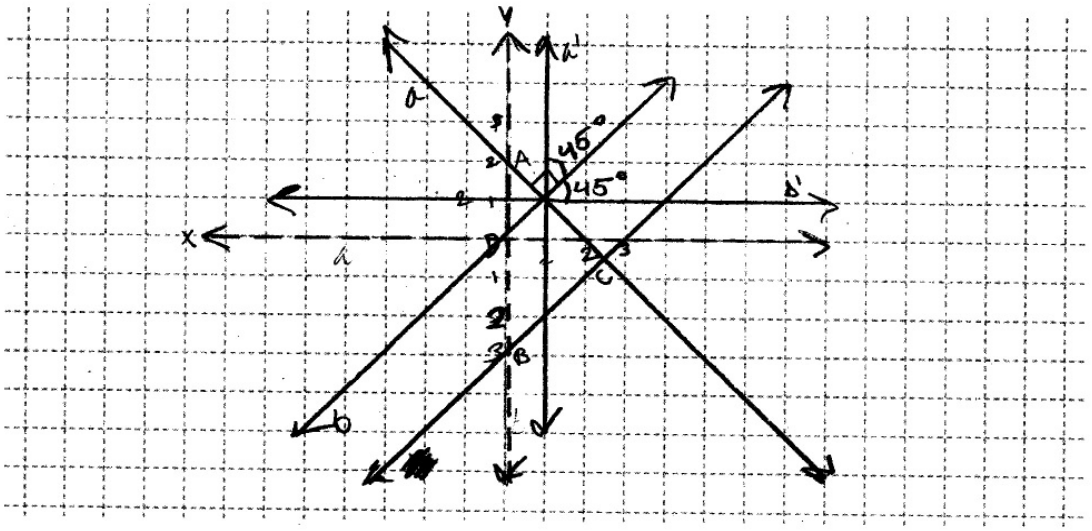
Line a is perpendicularl to line b. Prove that the slope of line a is the opposite of the reciprocal of the slope of line b (or that the product of their slopes is –1).

You may use the graphing grid to prepare any diagrams to accompany your proof.



Line a is ⊥ to Line b

slope of $\overline{a}$ is $y = -1x + 2$

$y = -x + 2$

slope of $\overline{b}$ is $y = x - 3$

slope of $\overline{a} = -y$

$\overline{b} = y$

slope a' = slope of y

slope b' = slope of x