

LINEAR TRIVIA

Q1 (4, 6)

Point A (-2, -4), B(3,5)

a) Find the midpoint

b) Find the distance

c) Find the line equation going through these two points

d) If C is on the segment of AB, and between A and B, $AC:CB=2:1$, find the coordinates of C

Q2 (3, 5)

Find the line equation

a) With slope 2, passing (2,3)

b) Parallel to $2x+3y=-1$, passing (3,-2)

c) Perpendicular to $3x-2y=-3$, passing (4,5)

Q3 (4, 10)

Solving the following Simultaneous Equation

a) $2x+3y=-1$, $3x-5y=7$

b) $2/x + 4/y = -2$, $3/x - 6/y = 3$

c) $2\sqrt{x} + 3\sqrt{y} = 8$, $3\sqrt{x} - 7\sqrt{y} = -11$

d) $x+y+z = -1$, $2x-y+3z = -12$, $3x+y-z = 9$

Q4 (4, 10)

Solve the following equalities and graph the solutions.

a) $3x+4 < 5x-1$

b) $2x-1 > 3x+6 > 7x-1$

c) $y < 2x-1, 3x+4y > 1, 4x-3y < 5$

d) Find the optimal value of $2x+3y$
Based on the region of question c

Q5 (2, 4)

Find the distance from point (2,5) to line $2x - 3y = 6$

Q7 (2, 4)

If P is the reflection of point (2,-2) in the line $2x-5y=10$, find the coordinates of P.