5x[1] + 6x[2]

X[1] + x[2] <=

Exercise

- Solve the following linear program:

  maximise $5x_1 + 6x_2$

- subject to

  $x_1 + x_2 <= 10$
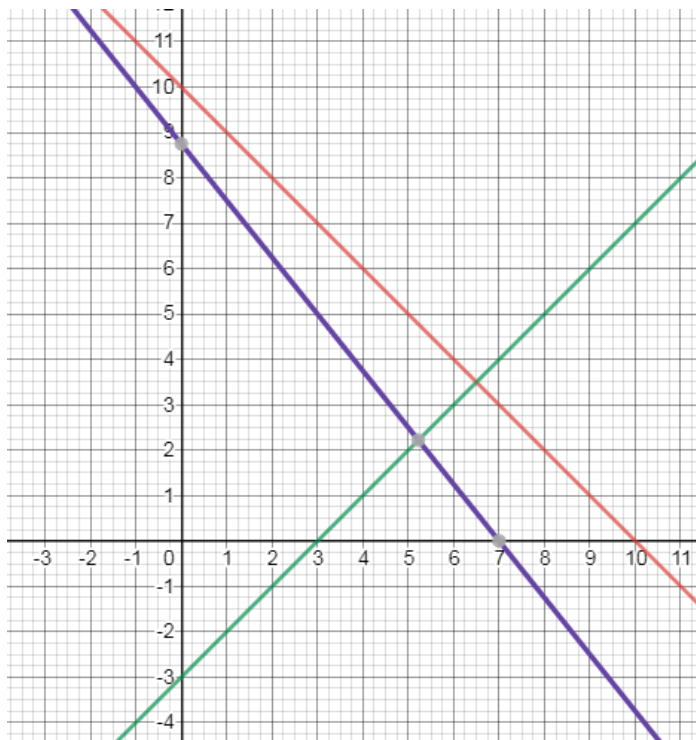 $x_1 - x_2 >= 3$
  $5x_1 + 4x_2 <= 35$
  $x_1 >= 0$
  $x_2 >= 0$

$5x_1 + 4x_1 - 12 = 35$

$9x_1 = 47$

$x_1 = 47/9$

$x_2 = 20/9$

Max(3,0) = 5(3) +6(0) = 15

Max(7,0) = 5(7) + 6(0)

Max(47/9, 20/9) = 5(47/9) + 3(20/9)

= 295/9

= 32.78