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let x be the number of vans
y be the number of minibuses
V is the value of the leases.

Restrictions

$x \in W$, $y \in W$

Constraints

$y \leq 5$

$10x + 16y \leq 120$

$x \geq 0$

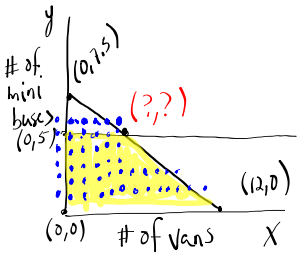
$y \geq 0$

x int:
$10x = 120$
$x = 12$ (12,0)

y int:
$16y = 120$
$y = 7.5$ (0,7.5)

Objective function

$V = 550x + 730y$



Find the intersection of $y = 5$ and $10x + 16y = 120$

$10x + 16(5) = 120$

$10x + 80 = 120$

$10x = 40$

$x = 4$

$(4,5)$

(Vertex)

Point		V
(0, 5)	$V = 550x + 730y$ $V = 550(0) + 730(5)$	$3650
(0, 0)	$V = 550(0) + 730(0)$	0
(12, 0)	$V = 550(12) + 730(0)$	$6600 MAX
(4, 5)	$V = 550(4) + 730(5)$	$5850

(12,0) gives a Value of $6600, but we need to check to see if it satisfies the constraints.

✓