HW 10.6
p715

7. $4(0)+3(0)=0$
$4(5)+3(0)=20$
$4(0)+3(5)=15$

min @ (0,0) → 0
max @ (5,0) → 20

8. $2(0)+8(0)=0$
$2(2)+8(0)=4$
$2(0)+8(4)=32$

min @ (0,0) → 0
max @ (0,4) → 32

9. $2(0)+5(0)=0$
$2(0)+5(5)=25$
$2(3)+5(4)=26$
$2(4)+5(0)=8$

min @ (0,0) → 0
max @ (3,4) → 26

10. $4(0)+5(2)=10$
$4(0)+5(4)=20$
$4(4)+5(3)=31$
$4(3)+5(0)=12$

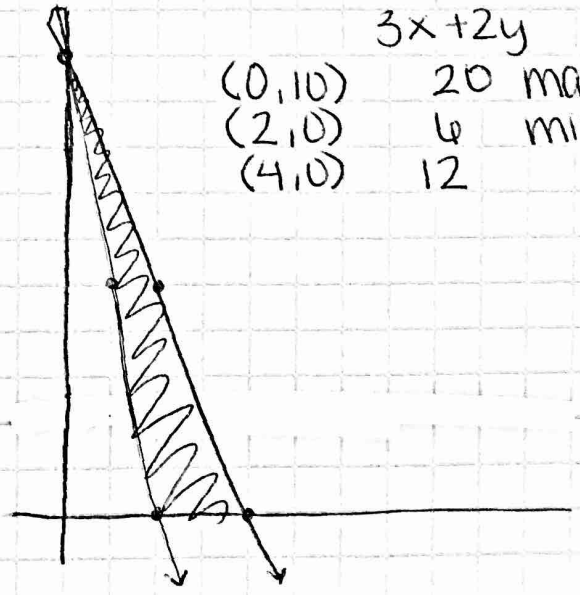
min @ (0,2) → 10
max @ (4,3) → 31

11. min @ (0,0) → 0
max @ (60,20) → 740

$10(0)+7(45)=315$
$10(30)+7(45)=615$
$10(60)+7(20)=740$
$10(60)+7(0)=600$

12. $40(0)+45(400)=18000$ min
$40(0)+45(800)=36000$ max
$40(900)+45(0)=36000$ max
$40(450)+45(0)=1800$ min

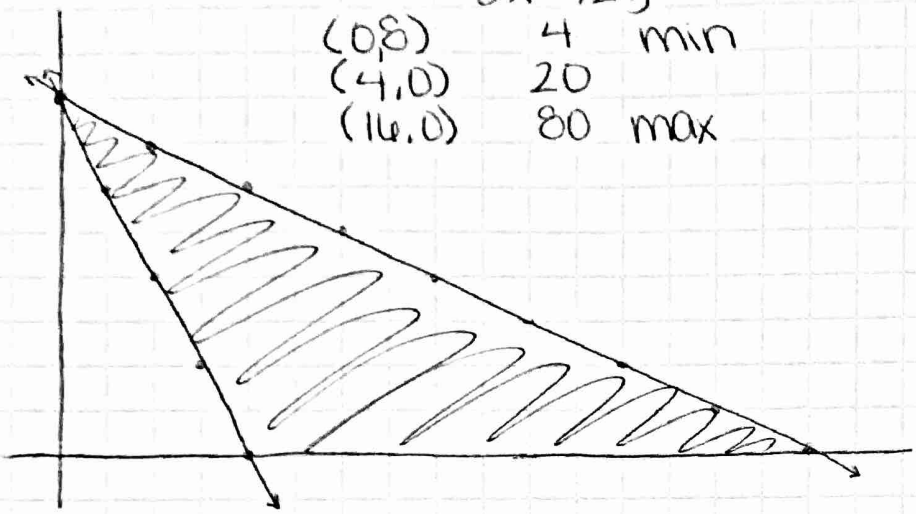
13. $x \geq 0$
$y \geq 0$
$y \leq 10-5/2x$
$y \geq 10-5x$



	$3x+2y$	
(0,10)	20	max
(2,0)	6	min
(4,0)	12	

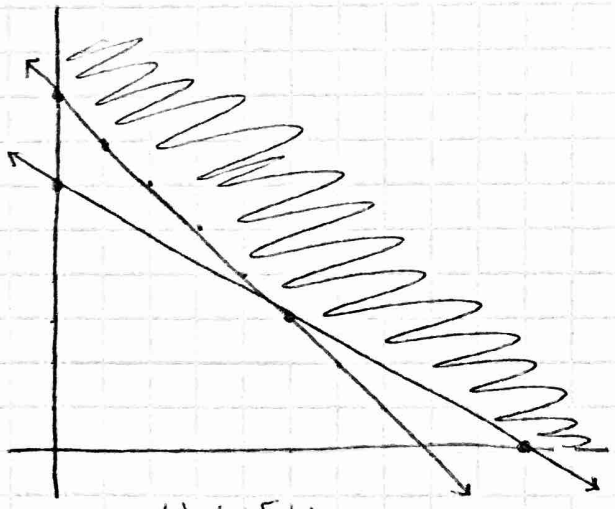
→

14 $x \geq 0$
$y \geq 0$
$y \leq 8 - \frac{1}{2}x$
$y \geq 8 - 2x$



	$5x + \frac{1}{2}y$	
(0,8)	4	min
(4,0)	20	
(16,0)	80	max

15. $x \geq 0$
$y \geq 0$
$y \geq 8 - x$
$y \geq 6 - \frac{3}{5}x$



	$4x + 5y$		
(0,8)	40		
(5,3)	35	min	no max
(0,10)	50		