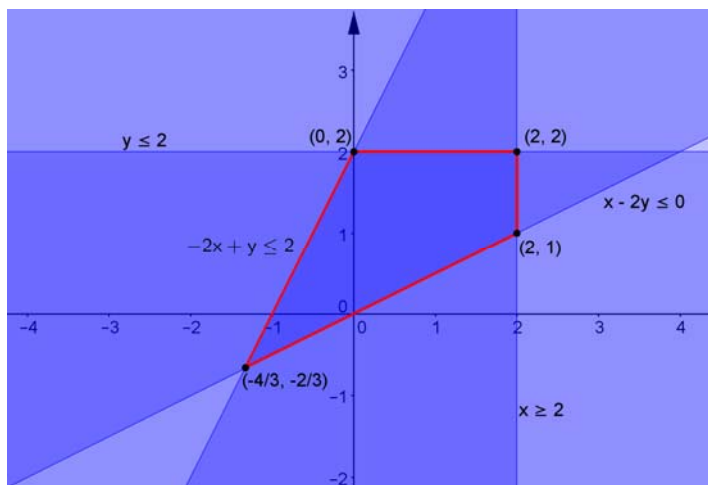


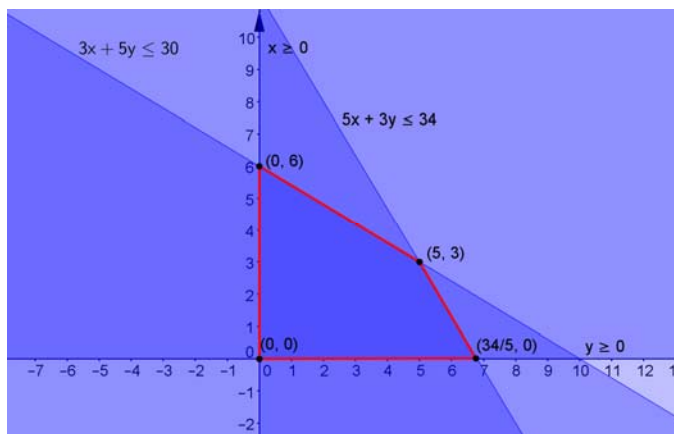
[1]



Corner Points	Function Values: $F(x, y) = 2x + 3y$
$(0, 2)$	$F(0, 2) = 2(0) + 3(2) = 6$
$(2, 2)$	$F(2, 2) = 2(2) + 3(2) = 10$
$(-4/3, -2/3)$	$F(-4/3, -2/3) = 2(-4/3) + 3(-2/3) = -14/3$
$(2, 1)$	$F(2, 1) = 2(2) + 3(1) = 7$

Therefore, the maximum value of  $F$  is 10 when  $x = 2$  and  $y = 2$ , and the minimum value of  $F$  is  $-14/3$  when  $x = -4/3$  and  $y = -2/3$ .

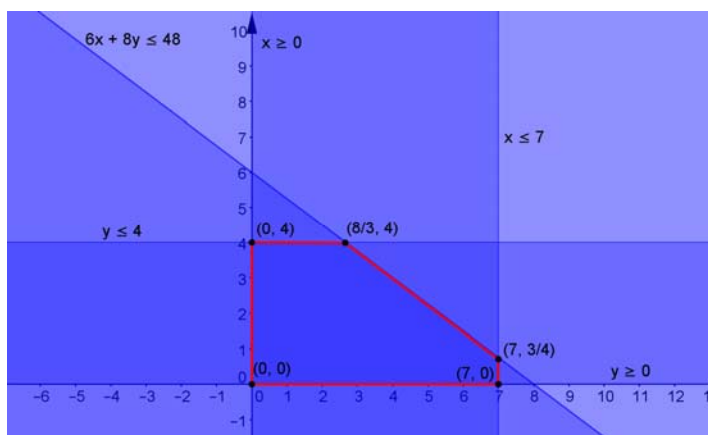
[3]



Corner Points	Function Values: $F(x, y) = 4x + 28y$
$(0, 0)$	$F(0, 0) = 4(0) + 28(0) = 0$
$(0, 6)$	$F(0, 6) = 4(0) + 28(6) = 168$
$(5, 3)$	$F(5, 3) = 4(5) + 28(3) = 104$
$(34/5, 0)$	$F(34/5, 0) = 4(34/5) + 28(0) = 136/5 = 27.2$

Therefore, the maximum value of  $F$  is 168 when  $x = 0$  and  $y = 6$ , and the minimum value of  $F$  is 0 when  $x = 0$  and  $y = 0$ .

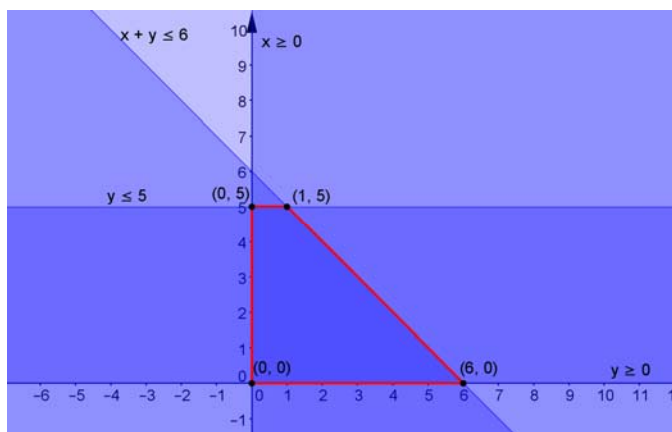
[5]



Corner Points	Function Values: $P(x, y) = 16x - 2y + 40$
$(0, 0)$	$P(0, 0) = 16(0) - 2(0) + 40 = 40$
$(0, 4)$	$P(0, 4) = 16(0) - 2(4) + 40 = 32$
$(8/3, 4)$	$P(8/3, 4) = 16(8/3) - 2(4) + 40 = 224/3 \approx 74.67$
$(7, 3/4)$	$P(7, 3/4) = 16(7) - 2(3/4) + 40 = 301/2 = 150.5$
$(7, 0)$	$P(7, 0) = 16(7) - 2(0) + 40 = 152$

Therefore, the maximum value of  $P$  is 152 when  $x = 7$  and  $y = 0$ , and the minimum value of  $P$  is 32 when  $x = 0$  and  $y = 4$ .

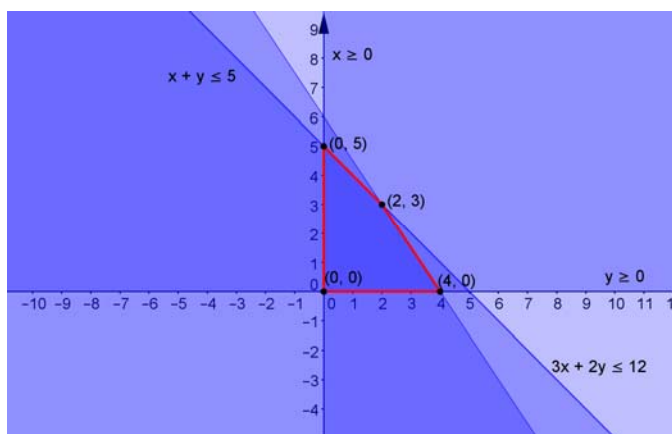
[7]



Corner Points	Function Values: $F(x, y) = x + 2y$
$(0, 0)$	$F(0, 0) = (0) + 2(0) = 0$
$(0, 5)$	$F(0, 5) = (0) + 2(5) = 10$
$(1, 5)$	$F(1, 5) = (1) + 2(5) = 11$
$(6, 0)$	$F(6, 0) = (6) + 2(0) = 6$

Therefore, the maximum value of  $F$  is 11 when  $x = 1$  and  $y = 5$ .

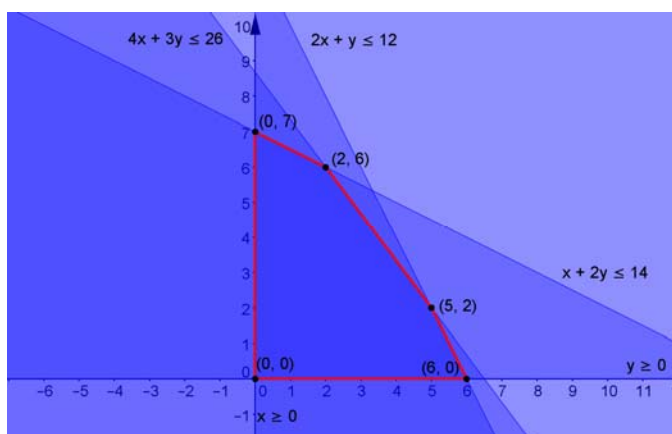
[9]



Corner Points	Function Values: $f(x, y) = 5x + 4y$
$(0, 0)$	$f(0, 0) = 5(0) + 4(0) = 0$
$(0, 5)$	$f(0, 5) = 5(0) + 4(5) = 20$
$(2, 3)$	$f(2, 3) = 5(2) + 4(3) = 22$
$(4, 0)$	$f(4, 0) = 5(4) + 4(0) = 20$

Therefore, the maximum value of  $f$  is 22 when  $x = 2$  and  $y = 3$ .

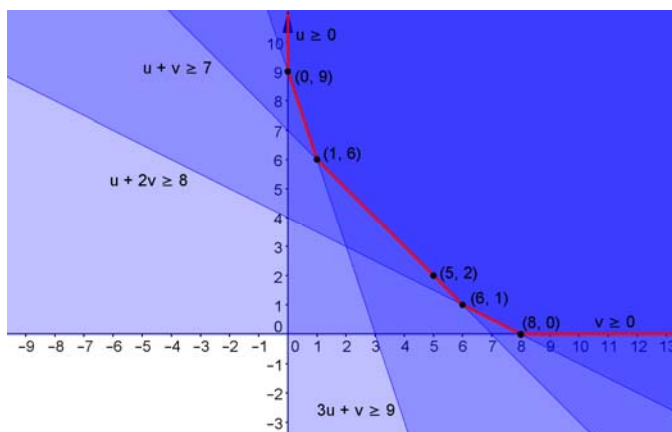
[11]



Corner Points	Function Values: $G(x, y) = 3x + 4y$
$(0, 0)$	$G(0, 0) = 3(0) + 4(0) = 0$
$(0, 7)$	$G(0, 7) = 3(0) + 4(7) = 28$
$(2, 6)$	$G(2, 6) = 3(2) + 4(6) = 30$
$(5, 2)$	$G(5, 2) = 3(5) + 4(2) = 23$
$(6, 0)$	$G(6, 0) = 3(6) + 4(0) = 18$

Therefore, the maximum value of  $G$  is 30 when  $x = 2$  and  $y = 6$ .

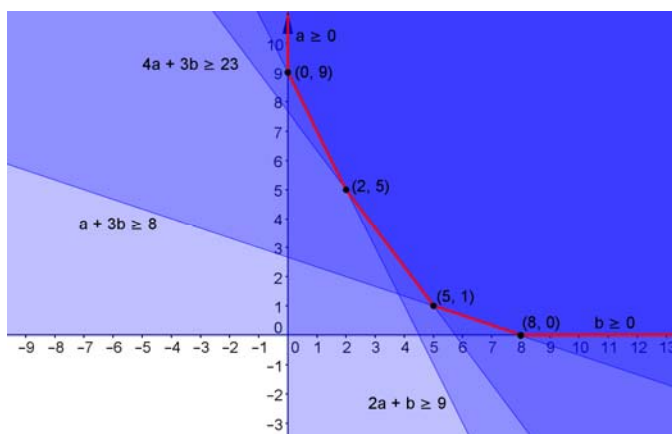
[13]



Corner Points	Function Values: $Z(u, v) = 3u + 4v$
(0, 9)	$Z(0, 9) = 3(0) + 4(9) = 36$
(1, 6)	$Z(1, 6) = 3(1) + 4(6) = 27$
(5, 2)	$Z(5, 2) = 3(5) + 4(2) = 23$
(6, 1)	$Z(6, 1) = 3(6) + 4(1) = 22$
(8, 0)	$Z(8, 0) = 3(8) + 4(0) = 24$

Therefore, the minimum value of  $Z$  is 22 when  $u = 6$  and  $v = 1$ .

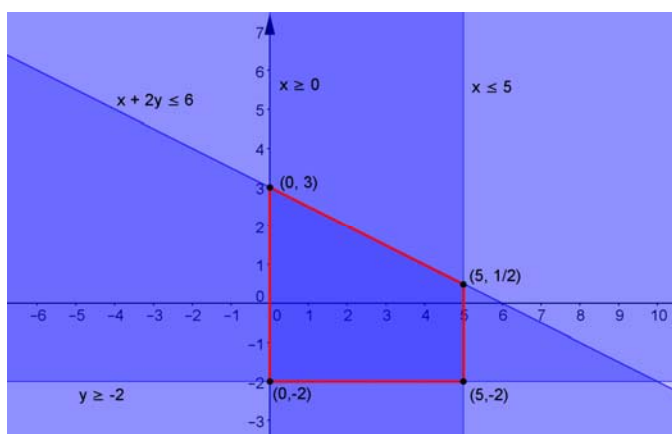
[15]



Corner Points	Function Values: $A(a, b) = 2a + 5b$
(0, 9)	$A(0, 9) = 2(0) + 5(9) = 45$
(2, 5)	$A(2, 5) = 2(2) + 5(5) = 29$
(5, 1)	$A(5, 1) = 2(5) + 5(1) = 15$
(8, 0)	$A(8, 0) = 2(8) + 5(0) = 16$

Therefore, the minimum value of  $A$  is 15 when  $a = 5$  and  $b = 1$ .

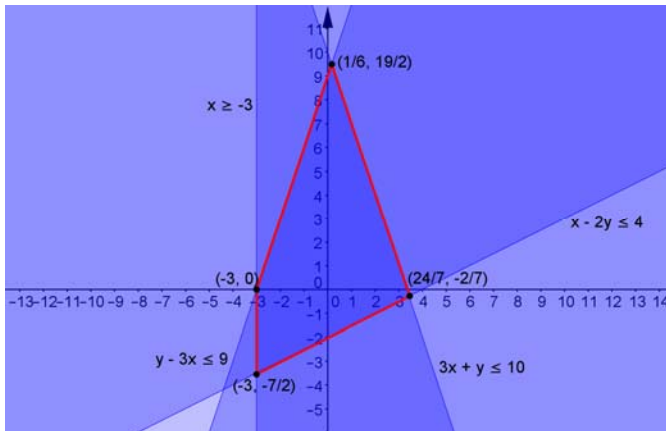
[17]



Corner Points	Function Values: $f(x, y) = x - y$
(0, -2)	$f(0, -2) = (0) - (-2) = 2$
(0, 3)	$f(0, 3) = (0) - (3) = -3$
(5, 1/2)	$f(5, 1/2) = (5) - (1/2) = 9/2 = 4.5$
(5, -2)	$f(5, -2) = (5) - (-2) = 7$

Therefore, the maximum value of  $f$  is 7 when  $x = 5$  and  $y = -2$ , and the minimum value of  $f$  is  $-3$  when  $x = 0$  and  $y = 3$ .

[19]



Corner Points	Function Values: $f(x, y) = x - y$
$(-3, -7/2)$	$f(-3, -7/2) = (-3) - (-7/2) = 1/2 = 0.5$
$(-3, 0)$	$f(-3, 0) = (-3) - (0) = -3$
$(1/6, 19/2)$	$f(1/6, 19/2) = (1/6) - (19/2) = -28/3 \approx -9.33$
$(24/7, -2/7)$	$f(24/7, -2/7) = (24/7) - (-2/7) = 26/7 \approx 3.71$

Therefore, the maximum value of  $f$  is  $26/7$  (or 3.71) when  $x = 24/7$  and  $y = -2/7$ , and the minimum value of  $f$  is  $-28/3$  (or  $-9.33$ ) when  $x = 1/6$  and  $y = 19/2$ .