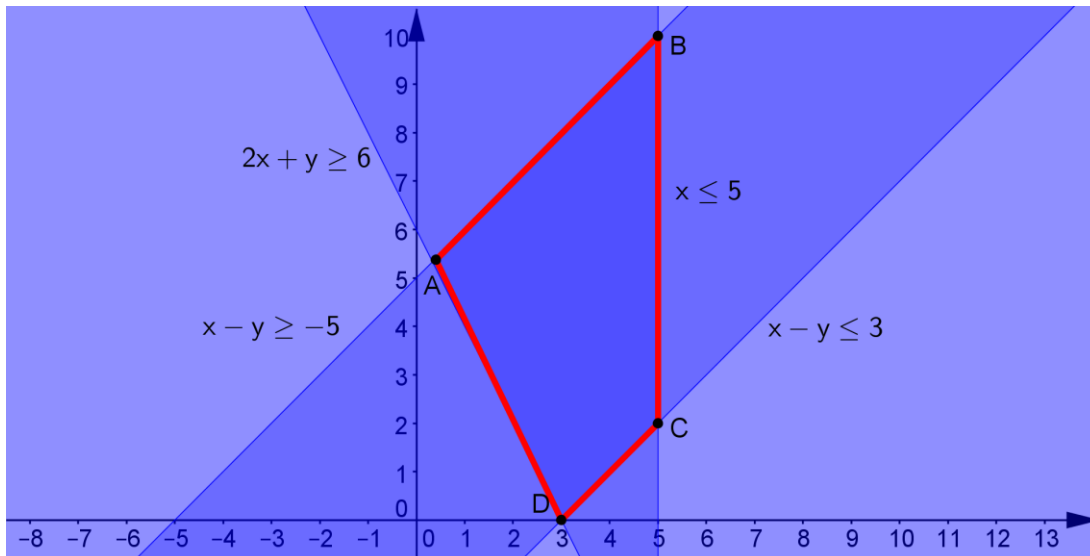


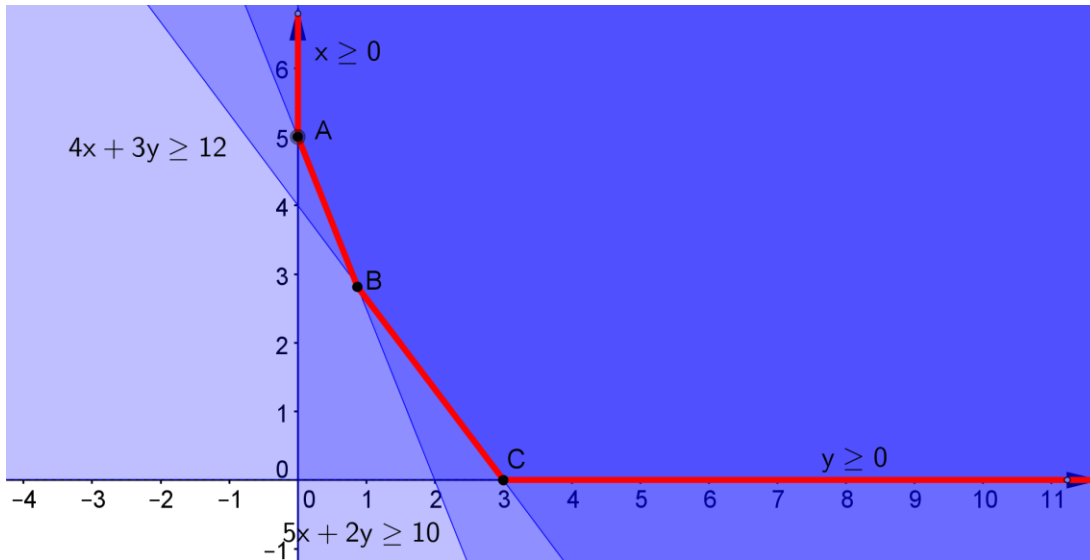
1. C
2. B
3. D
4. B
5. A
6. C
7. A
8. D
9. E
10. D

11. Max value of 120 at $x = 15$, $y = 0$
Min value of -36 at $x = 0$, $y = 12$

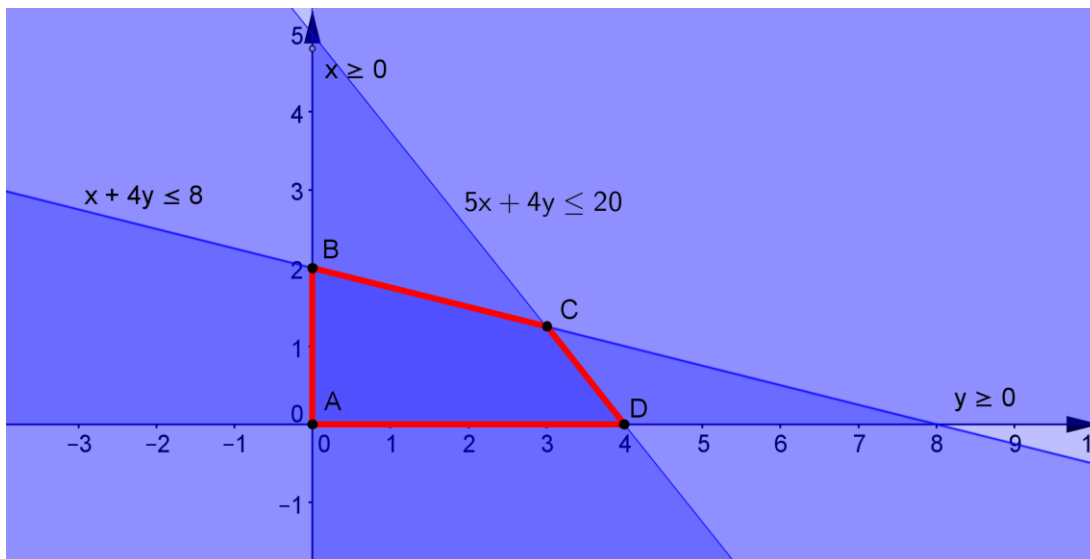
12. Bounded feasible region. Corner points at $A(1/3, 16/3)$, $B(5, 10)$, $C(5, 2)$, $D(3, 0)$



13. Unbounded feasible region. Corner points at $A(0, 5)$, $B(6/7, 20/7)$, $C(3, 0)$
 Min value of 64 at $x = 6/7$, $y = 20/7$



14. Corner points at $A(0, 0)$, $B(0, 2)$, $C(3, 5/4)$, $D(4, 0)$
 Max value of 0 at $x = 0$, $y = 0$
 Min value of $-247/4$ (or -61.75) at $x = 3$, $y = 5/4$



15. Minimize: $\text{Cost} = 15000x + 12000y$
 Subject to: $40x + 20y \geq 2800$
 $40x + 10y \geq 2000$
 $20x + 70y \geq 5600$
 $x, y \geq 0$

- 16a. 2 sacks of soybean meal and 4 sacks of oats
 16b. Minimum cost is \$210