**Graphing Inequalities**

In this internal we are not only graphing lines that are equal, but we are wanting to graph areas that are more or less than a line to find a ‘feasible region’. This is an area where all of the inequalities hold true. The first one has been done for you.

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| **Question 1**  4x + 3y ≤ 120  7x + 8y ≤ 280  x ≥ 5  y ≥ 10 |  |
| **Question 2**  12x + 5y ≤ 300  8x + 13y ≤ 520  x ≥ 5  y ≥ 16 |  |
| **Question 3**  14x + 9y ≤ 630  8x + 15y ≤ 600  x ≥ 5  y ≥ 10 |  |
| **Question 4**  11x + 9y ≤ 495  2x + 3y ≤ 120  x ≥ 11  y ≥ 17 |  |
| **Question 5**  18x + 5y ≤ 450  4x + 9y ≤ 360  x ≥ 8  y ≥ 16 |  |
| **Question 6**  5x + 2y ≤ 150  5x + 9y ≤ 450  x ≥ 12  y ≥ 11 |  |
| **Question 7**  13x + 10y ≤ 650  9x + 19y ≤ 855  x ≥ 19  y ≥ 20 |  |
| **Question 8**  3x + 2y ≤ 150  5x + 19y ≤ 475  x ≥ 13  y ≥ 7 |  |