**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 ≤ 1207x + 8y ≤ 280x ≥ 5y ≥ 10 |  |
| **Question 2**10x + 9y ≤ 4503x + 8y ≤ 240x ≥ 11y ≥ 18 |  |
| **Question 3**5x + 3y ≤ 3007x + 9y ≤ 630x ≥ 10y ≥ 8 |  |
| **Question 4**16x + 15y ≤ 12007x + 19y ≤ 665x ≥ 20y ≥ 5 |  |

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| **Question 5**11x + 14y ≤ 7709x + 20y ≤ 900x ≥ 16y ≥ 20 |  |
| **Question 6**17x + 8y ≤ 6809x + 13y ≤ 585x ≥ 7y ≥ 17 |  |
| **Question 7**13x + 5y ≤ 3258x + 15y ≤ 600x ≥ 10y ≥ 9 |  |
| **Question 8**17x + 4y ≤ 3403x + 5y ≤ 150x ≥ 5y ≥ 19 |  |

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| **Question 9**17x + 5y ≤ 4258x + 15y ≤ 600x ≥ 9y ≥ 15 |  |
| **Question 10**17x + 6y ≤ 51012x + 11y ≤ 660x ≥ 6y ≥ 11 |  |
| **Question 11**17x + 13y ≤ 110513x + 16y ≤ 1040x ≥ 12y ≥ 10 |  |
| **Question 12**19x + 7y ≤ 6653x + 5y ≤ 150x ≥ 12y ≥ 11 |  |

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| **Question 13**18x + 11y ≤ 99012x + 13y ≤ 780x ≥ 9y ≥ 15 |  |
| **Question 14**3x + y ≤ 754x + 11y ≤ 220x ≥ 17y ≥ 8 |  |
| **Question 15**17x + 10y ≤ 85011x + 12y ≤ 660x ≥ 12y ≥ 7 |  |
| **Question 16**13x + 5y ≤ 325x + 3y ≤ 60x ≥ 14y ≥ 6 |  |