

Lesson 7.3: Linear Inequalities in Two Variables

Complete the *Practice* below. When you have completed all the questions for *Lesson 7.3 Practice – III* with your best work, mark your work by first comparing your answers to the solutions provided in *Appendix 2: Solutions*. Then, apply the rubric found at the beginning of the *Workbook*.

**Practice – III**

1. Isolate y in the inequality $13x - \frac{4}{5}y \geq 48$.

2. Graph the following inequalities.

a. $y > 4x + 1$

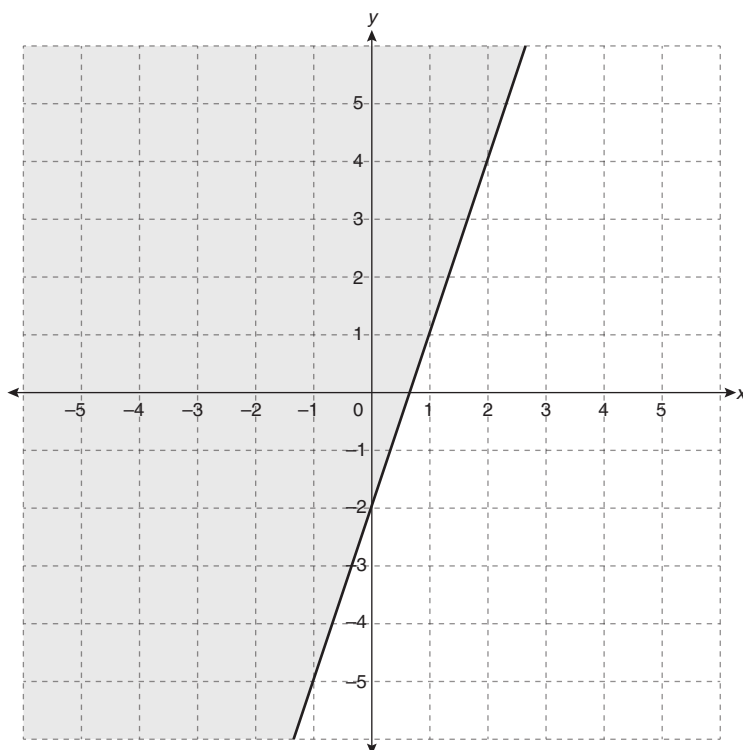


b. $3x + 2y - 9 \leq 12$

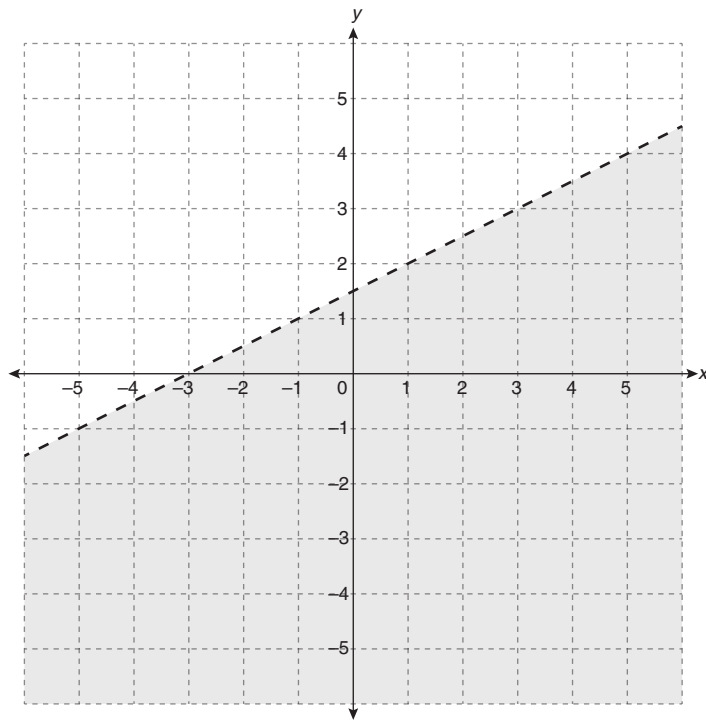


3. State an inequality that corresponds to each graph.

a.



b.



4. Explain why choosing a test point on the boundary of an inequality is not useful for determining where the solution region lies.

5. A used furniture store buys old mattresses for \$50 and sells them for \$200.
- a. Write an inequality representing all the possible combinations of mattress purchases and sales that will result in a profit of less than \$1 500.

b. Graph the inequality.



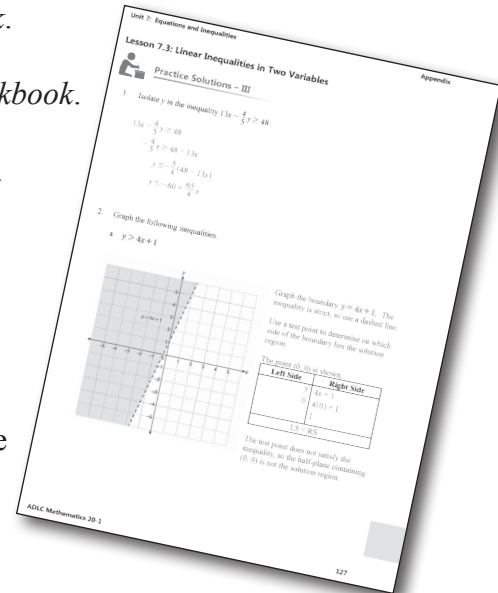
c. Describe an aspect of the used furniture business that an inequality cannot account for.

Mark your work for *Lesson 7.3 Practice – III* using the solutions provided in *Appendix 2: Solutions*. Then, apply the rubric found at the beginning of the *Workbook*.

Transfer your self-assessed mark to the front cover of the *Workbook*.

My self-assessed mark on *Lesson 7.3 Practice – III* is _____.

Reflect on your understanding of the concepts addressed in the *Practice* exercises in the table provided.



Question Number	Got it!	Almost there...	Need to retry or ask for help.	Similar questions from <i>Pre-Calculus 11</i>
1				p.472 #3cd
2				p.472 #4ac, 5ae
3				p.472 #9
4				
5				p.473 #11

You may proceed to *Explore Your Understanding Assignment* on the next page of this *Workbook*.

Note: Before you complete *Explore Your Understanding*, you may review your skills and get more practice by completing the following problems in *Pre-Calculus 11*.

- Page 472, #3cd, 4ac, 5ae, 9, and 11

Check your work in *Enhance Your Understanding*.

