



Basic Algebra – Unit 10: Cartesian Graphing, Plane Geometry and Graphs Study Guide

Text: Introductory Technical Mathematics, 6th Edition, Chapter 16, 19, & 31

Note: Do “Odd” numbered problems only

1. Review course structure.
2. Read Units 16.1 to 16.2: pages 396-399: Cartesian Coordinate System and Graphing a Linear Equation.
3. Complete the exercises on Cartesian Coordinate System and Graphing found at <https://www.khanacademy.org/math/basic-geo/basic-geo-coordinate-plane/copy-of-cc-6th-coordinate-plane/v/the-coordinate-plane>
4. Complete the exercises on Quadrants and the Cartesian Coordinate System found at: <https://www.khanacademy.org/math/basic-geo/basic-geo-coordinate-plane/copy-of-cc-6th-coordinate-plane/v/quadrants-of-coordinate-plane>
5. Do Exercises 16.2: page 400: # 1-23 for practice.
6. Read Chapter 5 of the PDF “Understanding Algebra,” found at <http://florida.theorange grove.org/og/file/66b477dc-7824-fa97-6bf9-2afd81af94f4/1/Understanding%20Algebra.pdf>
7. **Watch:** <https://www.youtube.com/watch?v=qkAWuX438gM&index=18&list=PLgtmo2gg-C6sRWof7uae4sqylBUtFShQV>
Title: Linear Equation Standard Form
Author: Quick Stop Math Shop
8. Read Unit 16.3: page 400: Slope of a Linear Equation
9. Do Exercises 16.3: page 401: # 1-15 for practice.
10. **Watch:** <https://www.youtube.com/watch?v=Y2qlePZZ53w&index=15&list=PLgtmo2gg-C6sRWof7uae4sqylBUtFShQV>
Title: Graph Linear Equation Slope Intercept
Author: Quick Stop Math Shop





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11. Complete the exercises on Graphing Lines and Determining Slope found at:
<https://www.khanacademy.org/math/algebra-basics/core-algebra-graphing-lines-slope/core-algebra-graphing-coordinate-plan/v/plot-ordered-pairs>
12. Read Unit 16.4: page 401: Slope Intercept Equation
13. Do Exercises 16.4: page 401: # 1-11 for practice.
14. Read Unit 16.5: page 401: Point Slope Equation of a Straight Line
15. Do Exercises 16.5: page 402: # 1-7 for practice.
16. Read Unit 16.6: page 402: Determining an Equation Given Two Points
17. Do Exercises 16.6: page 403: # 1-15 for practice.
18. Read Unit 16.7: pages 403-405: Describing a Straight Line
19. Do Exercises 16.7: page 406: # 1-7 for practice.
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20. Review course structure for Chapter 19: Introduction to Plane Geometry
21. Read Units 19.1-19.3: pages 450-455: Plane Geometry, Axioms and Postulates and Points and Lines
22. Complete the exercises on Triangles and Parallelograms found at:
<https://www.khanacademy.org/math/geometry/geometry-miscellaneous/geometry-worked-examples/v/ca-geometry-triangles-and-parallelograms>
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23. Review course structure for Chapter 31 – Graphs
24. Read Units 31.1 to 31.2: pages 644-648: Types and Structure of Graphs and Reading Bar Graphs
25. Complete the exercises on the Introduction to Graphing found at:
<https://www.khanacademy.org/math/algebra-basics/core-algebra-graphing-lines-slope/core-algebra-graphing-linear-inequalities/v/graphing-inequalities>





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26. Do Exercises 31.2: pages 648-649: # 1 and # 3 for practice.
27. Read Unit 31.3: pages 650-651: Drawing Bar Graphs
28. Review the information on Reading Bar Graphs found at: <https://www.khanacademy.org/math/pre-algebra/applying-math-reasoning-topic/reading-data/v/reading-bar-graphs>
29. Do Exercises 31.3: pages 651-652: # 1 and # 3 for practice.
30. Read Unit 31.4: pages 654-658: Drawing Bar Graphs with a Spreadsheet
31. Do Exercises 31.4: pages 656-657: # 1 and # 3 for practice.
32. Read Unit 31.5: pages 657-659: Circle Graphs
33. Review the information on Reading Circle Graphs found at: <https://www.khanacademy.org/math/in-eighth-grade-math/intro-graphs/introduction-to-graphs/v/reading-pie-graphs-circle-graphs>
34. Do Exercises 31.5: pages 659-661: # 1-7 for practice.
35. Read Unit 31.6: pages 661-662: Drawing Circle Graphs with a Spreadsheet
36. Do Exercises 31.6: pages 661-662: # 1 and # 3 for practice.
37. Read Units 31.7 to 31.9: pages 663-667: Line Graphs, Reading Line Graphs and Reading Combined-Data Line Graphs
38. Review the information on Reading Line Graphs found at: <https://www.khanacademy.org/math/ab-sixth-grade-math/al-statistics-probability/al-data/v/u08-l1-t2-we2-reading-line-graphs>
39. Do Exercises 31.9: pages 667-669: # 1 and # 3 for practice.
40. Read Units 31.10 to 31.12: pages 670-673: Drawing Line Graphs, Drawing Broken-Line Graphs and Drawing Broken-Line Graphs with a Spreadsheet
41. Do Exercises 31.12: pages 674: # 1 and # 3 for practice.





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42. Read Units 31.13 to 31.14: pages 674-677: Drawing Straight-Line Graphs and Drawing Curved-Line Graphs
43. **Watch:** <https://www.youtube.com/watch?v=oQD1QLtEku4&list=PLgtmo2gg-C6sRWoF7uae4sqylBUtFShQV&index=13>
Title: Graph Linear Equation in Standard Form
Author: Quick Stop Math Shop
44. Do Exercises 31.14: pages 677-678 # 1-5 for practice.
45. Complete Unit Lab/Test in lab. See lab instructor.





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