College of Staten Island MTH 035

## Course Outline

Text: Intermediate Algebra 3 ${ }^{\text {rd }}$ edition, Schaum's Outlines. Ray Steege, Kelly Bailey. ISBN 978-1-260-12074-5

Description: MTH 035 serves two purposes: to assist and ensure that the homework in a co-requisite MTH 123 course is being done in a timely and accurate manner; and to ensure that the foundational skills of intermediate algebra are fully mastered. It is expected that half of each class will be devoted to each. This syllabus pertains to the intermediate algebra portion of the course.

F14: JV, AR, DM, MT, JCD; S19: RF

| Lesson | Description | Assignment |
| :---: | :---: | :---: |
| 1 | Linear and Literal Equations | $\begin{aligned} & \text { p129: } 4.2 \mathrm{a}, \mathrm{c}, \mathrm{e}, \mathrm{~g}, \mathrm{i}, \mathrm{k} \\ & \text { p130: } 4.7 \mathrm{a}, \mathrm{c}, \mathrm{e}, \mathrm{~g} \end{aligned}$ |
| 2 | Lines: slope, point-slope, and slopeintercept form | $\begin{aligned} & \text { p129: } 4.3 \mathrm{~d}, \mathrm{e}, \mathrm{f} \\ & \text { p130: } 4.4 \mathrm{a}, \mathrm{~b}, \mathrm{~d}, \mathrm{e} \\ & \text { p284: } 8.8 \mathrm{a}, \mathrm{~b}, \mathrm{c} \\ & \text { p284: } 8.10 \mathrm{~b}, \mathrm{c} \\ & \text { p284: } 8.13 \mathrm{a}, \mathrm{c} \end{aligned}$ |
| 3 | Lines: parallel and perpendicular lines, standard form of a line | P284: $8.9 \mathrm{a}, \mathrm{b}$ P284: $8.14 \mathrm{a}, \mathrm{b}$ P284: $8.15 \mathrm{a}, \mathrm{b}$ P284: 8:16 a,b,c,d |
| 4 | Exponents (integer powers), scientific notation | $\begin{aligned} & \text { P167: } 5.1 \mathrm{e}, \mathrm{f}, \mathrm{~g}, \mathrm{~h} \\ & \text { P168: } 5.2 \mathrm{c}, \mathrm{e}, \mathrm{~g}, \mathrm{i}, \mathrm{k} \\ & \text { P168: } 5.3 \mathrm{a}, \mathrm{c}, \\ & \text { P168: } 5.4 \mathrm{a}, \mathrm{c}, \mathrm{e} \\ & \text { P168: } 5.5 \mathrm{a}, \mathrm{~b}, \mathrm{c} \\ & \hline \end{aligned}$ |
| 5 | Exponents (rational powers), radical notation | P168: 5.7 b,d,f P168: 5.8 a,c,e,g,i P169: 5.9 a,c,e P169: 5.10 b,d,f,h P169: 5.11 b,d,f,h P169: 5.12 b,d,f |
| 6 | Complex number: i, addition, subtraction and multiplication, division | P170: 5.16 a-r |
| 7 | Quadratic expression, the quadratic equation | P210: 6.1 a,c,e,g <br> P211: 6.2 a,c,e <br> P211: 6.3 a,b <br> P211: $6.4 \mathrm{a}, \mathrm{c}$ <br> P211: 6.5 a,b,c,d |


| 8 | Radical expressions and radical equations | $\begin{aligned} & \text { P169: } 5.13 \text { a,c,e,g } \\ & \text { P169: } 5.14 \text { a,c,e } \\ & \text { P169: } 5.15 \text { a,c,e,g } \end{aligned}$ |
| :---: | :---: | :---: |
| 9 | Rational expressions | P87: 3.1 b,d,f <br> P87: 3.2 b,d,f <br> P87: 3.3 a,c,e <br> P87: 3.4 a,c,e,g,i,k <br> P87: 3.5 b,d,f,h |
| 10 | Rational expression and equations, applications | $\begin{aligned} & \text { P88: } 3.6 \mathrm{~b}, \mathrm{~d}, \mathrm{f}, \mathrm{~h} \\ & \text { P88: } 3.7 \mathrm{a}, \mathrm{~b} \\ & \text { P88: } 3.8 \mathrm{a}, \mathrm{c}, \mathrm{e} \\ & \text { P88: } 3.10 \mathrm{~b}, \mathrm{~d}, \mathrm{f}, \mathrm{~h} \\ & \text { P89: } 3.11 \mathrm{a}, \mathrm{c}, \mathrm{~g}, \mathrm{i}, \mathrm{k} \end{aligned}$ |
| 11 | Linear inequalities (one variable), absolute- value inequalities | $\begin{aligned} & \text { P131: } 4.17 \text { a,c,e,g } \\ & \text { P132: } 4.24 \text { a,c,d,f,g,h } \\ & \text { P132: } 4.25 \text { a,c,e,g,i,k } \end{aligned}$ |
| 12 | Linear inequalities in two variables | $\begin{aligned} & \text { P131: } 4.18 \mathrm{a}-\mathrm{g} \\ & \text { P131: } 4.19 \\ & \text { P131: } 4.20 \\ & \text { P131: } 4.21 \\ & \text { P131: } 4.22 \\ & \text { P131: } 4.23 \\ & \hline \end{aligned}$ |
| 13 | Graphing quadratic equations | $\begin{aligned} & \text { P212: } 6.11 \text { a-h } \\ & \text { P212: } 6.12 \text { a-c } \\ & \text { P212: } 6.13 \text { a,c,e } \end{aligned}$ |
| 14 | Review for MTH 123 final exam |  |

