I. Equation Forms of a Line: Summary (p.158)

1. $y = mx + b$ — slope-intercept form
2. $Ax + By = C$ — standard form
3. $y = b$ — horizontal line form
4. $x = a$ — vertical line form
5. $y - y_1 = m(x - x_1)$ — point-slope form
   $P_1(x_1,y_1)$ is any point on the line

II. Examples (p.163): Exercises #14,16

III. Parallel & Perpendicular Lines (pp.160-161):

1. Parallel lines have the same slope...
   i.e., $m_1 = m_2$
2. Perpendicular lines have slopes which are negative reciprocals of each other...
   i.e., $m_1 = -1/m_2$ (*or* $m_1 \cdot m_2 = -1$)
   also, can be a horizontal & vertical line

IV. Example (p.163): Exercise #34,46

HW: pp.163-164 / Exercises #3,9,13,19,29,35,45, 47,49,53

Exam I: **Chapters 1 & 2** covered

approx. 10-12 problems...
Order of operations, exponents & scientific notation
Solve an equation (one variable)
% application problems
Graph an equation/function
Function notation, arithmetic (±, × or ÷), Domain & Range
Slope (m) formula
Find ***x***- and ***y***-intercepts of a linear function
Find equation of a line: $y = mx + b$ or $Ax + By = C$
Parallel ($m_1 = m_2$) *vs* Perpendicular ($m_1 = -1/m_2$)
Calculator, pencil, eraser, straight-edge needed!