Ch.1 GROUP QUIZ TOMORROW!!

30 points, show all work.

No notes, no calculator.

How to get prepared:

Read through your notes/examples,

Practice old homework problems,

See webssign for extra review.

1.6 CHECK EVENS FROM YESTERDAY:

24. $-6+6i$

40. $\frac{11}{25}-\frac{23}{25}i$

54. $\frac{9}{4}i$

62. $\pm\frac{\sqrt{3}}{3}i$

64. $-1\pm i$

NOTES 1.9

THE DISTANCE FORMULA

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

NOTES 1.9

MIDPOINT FORMULA

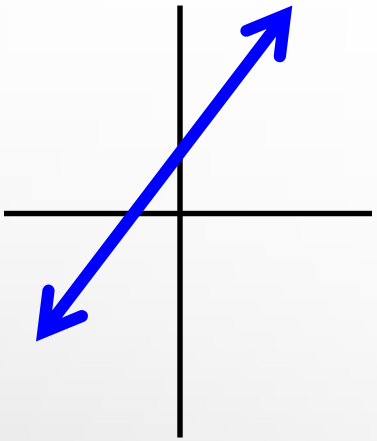
$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

NOTES 1.9

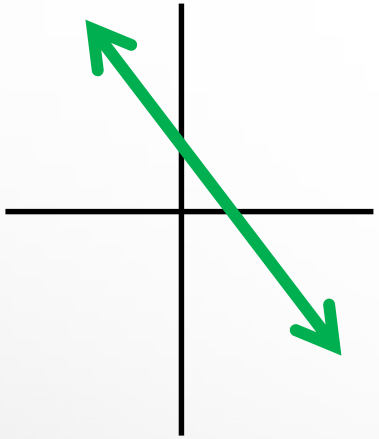
TO SOLVE FOR X-INTERCEPTS, LET Y = 0

TO SOLVE FOR Y-INTERCEPTS, LET X = 0

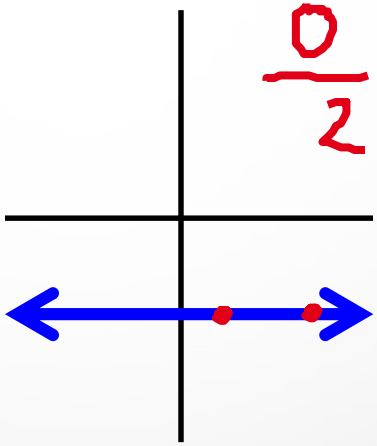
NOTES 1.10 → LINES



positive slope

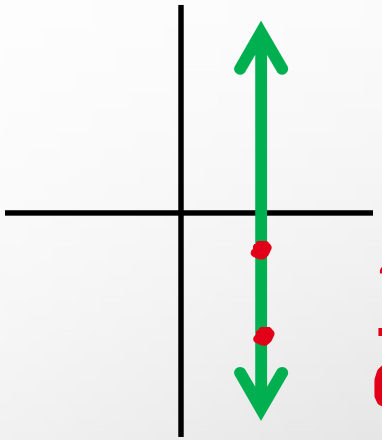


negative slope



$\frac{0}{2}$

slope = 0



$\frac{2}{0}$

no slope (undefined)

$$\text{slope} = \frac{\text{rise}}{\text{run}}$$

$\frac{\Delta y}{\Delta x}$

Slope-intercept form of a line:

$$y = mx + b$$

Slope y-intercept

$$m = \frac{\Delta y}{\Delta x} \quad \text{or} \quad m = \frac{y_2 - y_1}{x_2 - x_1}$$

Parallel lines: slopes are the same

$y=2x+3$ is parallel to $-2x+y=7$

$y=2x+7$

Perpendicular lines: slopes are "negative reciprocals"

$$y=2x+3 \rightarrow y=\frac{-1}{2}x+5$$

Today's assignment is online

→ see WebAssign for 1.9, 1.10, 1.6

Since there is a group quiz tomorrow, the online assignment is due Tuesday. You will need paper to solve many of the problems. Keep your written work so you can use it for reference when studying for the unit test!

You get 5 attempts per problem and the score has been submitted if you are able to see it at the top of your assignment.

MISTAKES
ALLOW
THINKING TO
HAPPEN