

Math 10: Unit 6.2: Special Cases of Linear Relations

A) We know:

standard form:

general form:

slope intercept form:

point slope form:

B) What about lines with '0' slope or 'undefined slope'?

i) '0' slope:

ii) 'undefined' slope:

C) How to find an equation when given 2 points?

Ex: find equation for: (3,1) and (-2, -5)

Step 1: find slope:

Step 2: pick ONE of the 2 given points, and use point slope form OR slope intercept form...substitute

ex: Line passes through (13, 6) and (-2, 5). Give the equation in both standard form and slope intercept form.

D) Are the lines parallel and perpendicular?

-look at the slopes of the 2 lines?

-remember: if $m_1 = m_2$: the 2 lines are **parallel** to each other

if $m_1 m_2 = -1$... or if rewrite as $m_1 =$: lines are **perpendicular**

if not one of the above: **neither**(lines will intersect, but NOT at 90°)

Ex: $3x - y = 5$ and $-6x + 2y = 12$. Are the lines parallel, perpendicular, or neither?

Ex: $4x+3y=7$ and $2x-y=5$

Try: $x+2y=6$ and $-2x+y=3$

-pg 254 #2-7(left column)
-quiz next day on chp 6.1 and 6.2

