

Name

6.5 Ext.

# Use Piecewise functions

Alg I

I can graph and write

Piecewise Function: At least 2 equations with different domains.

Piecewise functions.

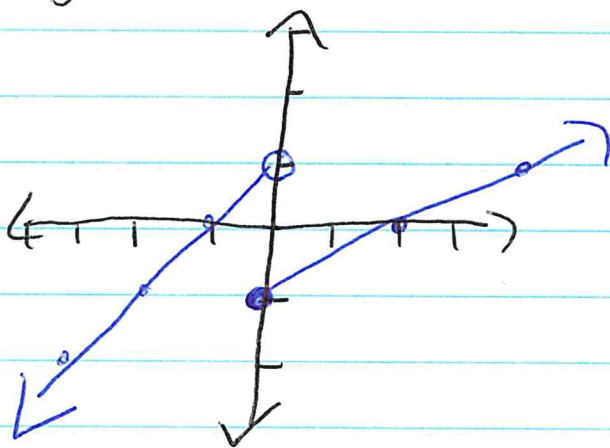
Example 1:

Semester Exam

$$1) y = \begin{cases} x+1, & \text{if } x < 0 \\ 0.5x-1, & \text{if } x \geq 0 \end{cases}$$

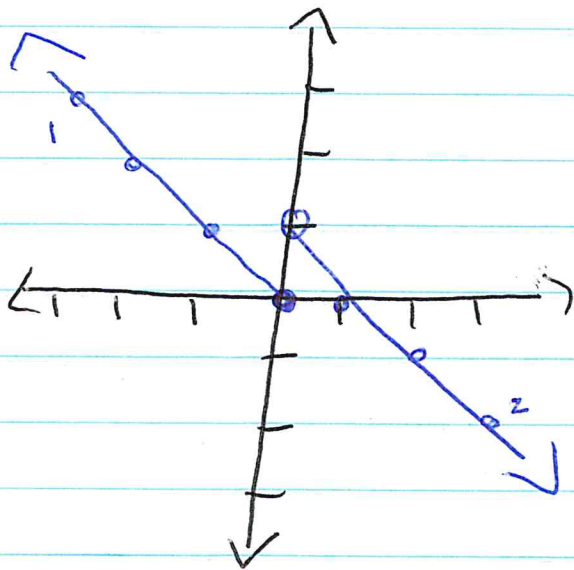
$$y = x + 1 \quad \begin{matrix} m = 1 \\ b = (0, 1) \end{matrix}$$

$$y = 0.5x - 1 \quad \begin{matrix} m = 1/2 \\ b = (0, -1) \end{matrix}$$



Example 2:

4)



$$1) m = -1 \quad b = (0, 0)$$

$$2) m = -1 \quad b = (0, 1)$$

$$y = \begin{cases} -x, & \text{if } x \leq 0 \\ -x+1, & \text{if } x > 0 \end{cases}$$

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Alg I

I can graph and write piecewise functions.

Step Function: A piecewise function that resembles a set of stairs.

Semester Exam

