

STARTER 1.8 – Get whiteboard

Sketch the following on the whiteboard: without your calculator

- $y = |x|$
- $y = |x| - 2$
- $y = |x - 2|$
- $y = |x + 1|$
- $y = |x - 1| + 1$
- $y = -|x|$
- $y = -|x + 2| - 2$
- $y = [x]$

$$f(x) = \begin{cases} 2 & \text{for } x < 1 \\ 1 & \text{for } x \geq 1 \end{cases}$$

$$h(x) = \begin{cases} -2 & \text{for } x \leq -3 \\ 2x+1 & \text{for } -3 < x < 1 \\ 1 & \text{for } x \geq 1 \end{cases}$$

Homework from page 49

1.8: Graphing Linear Inequalities

- Shading
- Solid/Dotted Lines

Graph each of the following on multi-graph paper.

- $y \geq 3$
- $y < 3$
- $x > -1$
- $x - 2y < 8$
- $y \geq \frac{3}{4}x - 7$
- $2x - y > 4$
- $\frac{3}{4}x - 3 \leq y \leq \frac{4}{5}x + 4$
- $y = |x|$
- $y = |x| + 2$
- $y = |x - 1|$
- $y = |x + 3| - 2$
- $y > |x + 1|$
- $y - 3 \leq |x + 4|$