Spring into math - teacher notes

Turn on the Inequalities Application: **apps** 5: Inequalz



To change colors and inequality symbols: Arrow left until the desired Yx = line is outlined with a box. Press enter. Use the dialogue box to select settings.

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	Y 8 =				
	Y 9 =				

To enter multiple functions in a Yx = row, use the piecewise template: math Select: B: piecewise(

Use dialogue box to select quantity of pieces per Yx = line.

NORMAL FLOAT AUTO REAL RADIAN MP Press [<] or [>] to select an option	Ō				
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5: Pieces: 3 🐼					
7: OK CLEAR					
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To fill in flowers:

5: Inequalz apps



2: Inequal Intersection, select magenta

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Reminders: Take note of the inequality symbols on Yx lines to get the proper shaded in areas to produce the designs. When entering multiple functions per Yx line, use the piecewise template. Hint: when you see f(x) use the piecewise template.



OR











Orange

ſ	x + 12 + 5; -10 ≤ x <-9
	x + 6 + 5; -9 ≤ x <-3
$f(x) \ge \langle$	x + 5; -3 ≤ x <3
	x − 6 + 5; -10 ≤ x < 9
	x − 12 +5; -10 ≤ x ≤ 10
ſ	$- x+12 - 5 \cdot -10 < x < -9$

$$f(x) \leq \begin{cases} -|x+12| - 5; -10 \leq x < -9 \\ -|x+6| - 5; -9 \leq x < -3 \\ -|x| - 5; -3 \leq x < 3 \\ -|x-6| - 5; 3 \leq x < 9 \\ -|x-12| - 5; 9 \leq x \leq 10 \end{cases}$$

Yellow

$$f(x) = \left\{ \sqrt{1 - x^2}; -1 \le x \le 1 \right\}$$

$$f(x) = \left\{ -\sqrt{1 - x^2}; -1 \le x \le 1 \right\}$$

$$f(x) = \left\{ \sqrt{4 - x^2}; -2 \le x \le 2 \right\}$$

$$f(x) = \left\{ -\sqrt{4 - x^2}; -2 \le x \le 2 \right\}$$

$$f(x) = \left\{ -\sqrt{4 - x^2}; -3 \le x \le 3 \right\}$$

$$f(x) = \left\{ -\sqrt{9 - x^2}; -3 \le x \le 3 \right\}$$

$$f(x) = \left\{ \sqrt{16 - x^2}; -4 \le x \le 4 \right\}$$

$$f(x) = \left\{ -\sqrt{16 - x^2}; -4 \le x \le 4 \right\}$$







