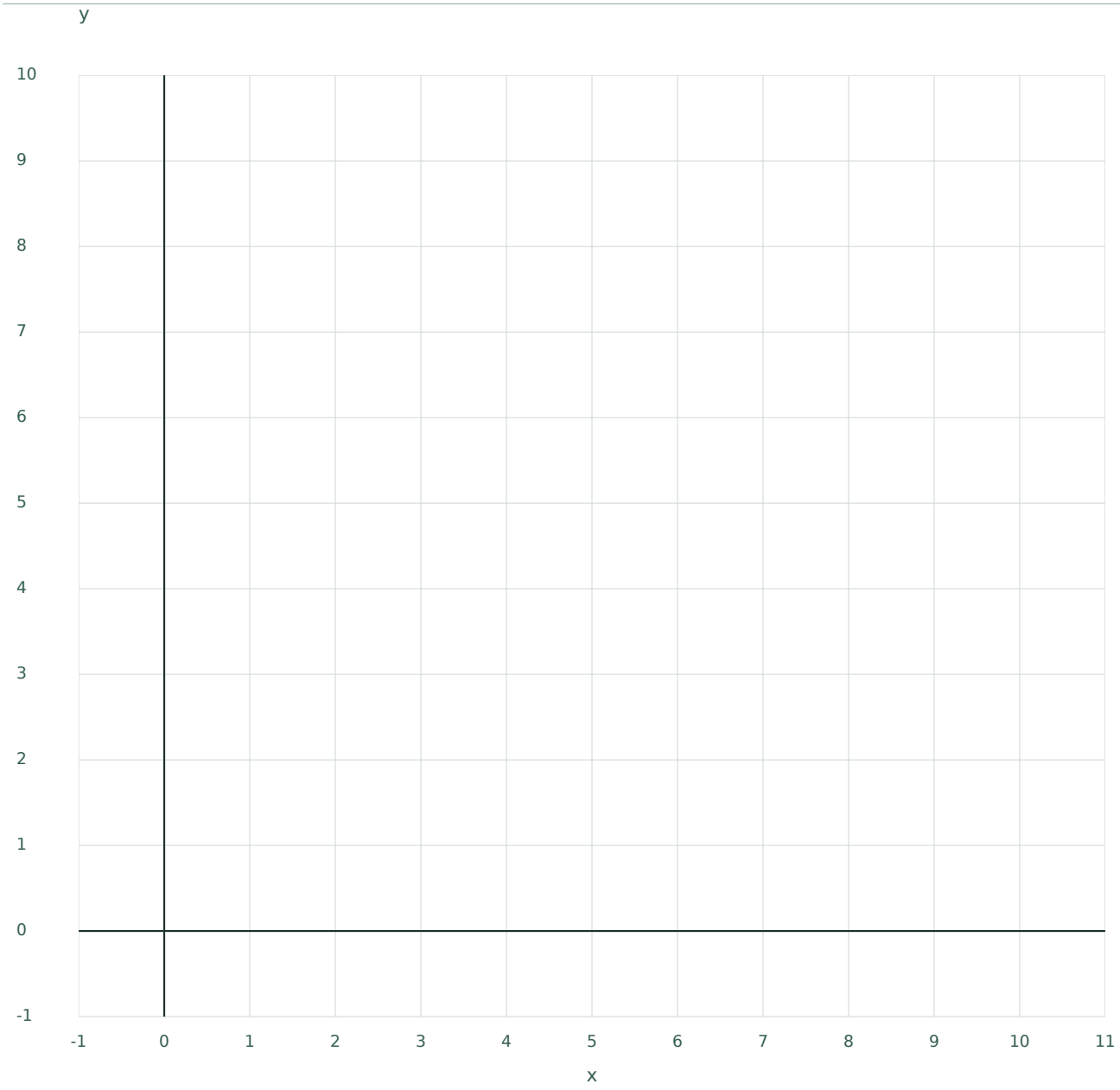
Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

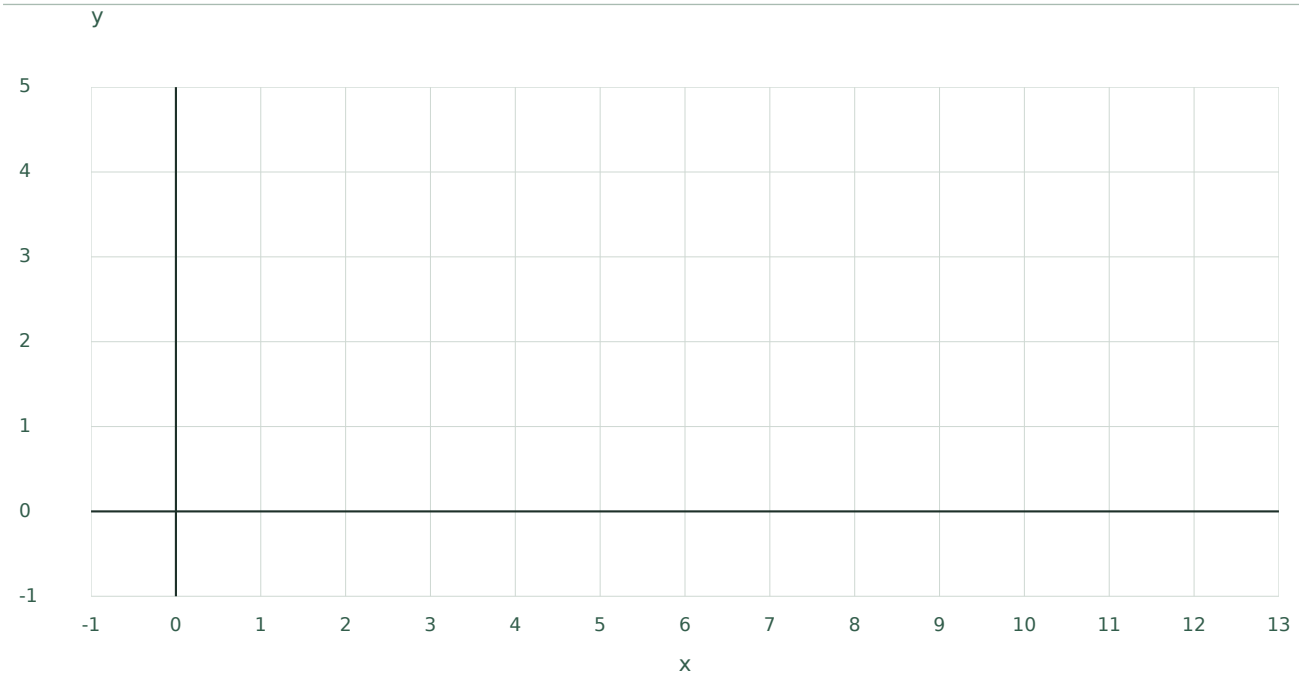
Blank grid 1: plot y = f(x) + 3



Student plotting space for y = f(x) + 3.

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

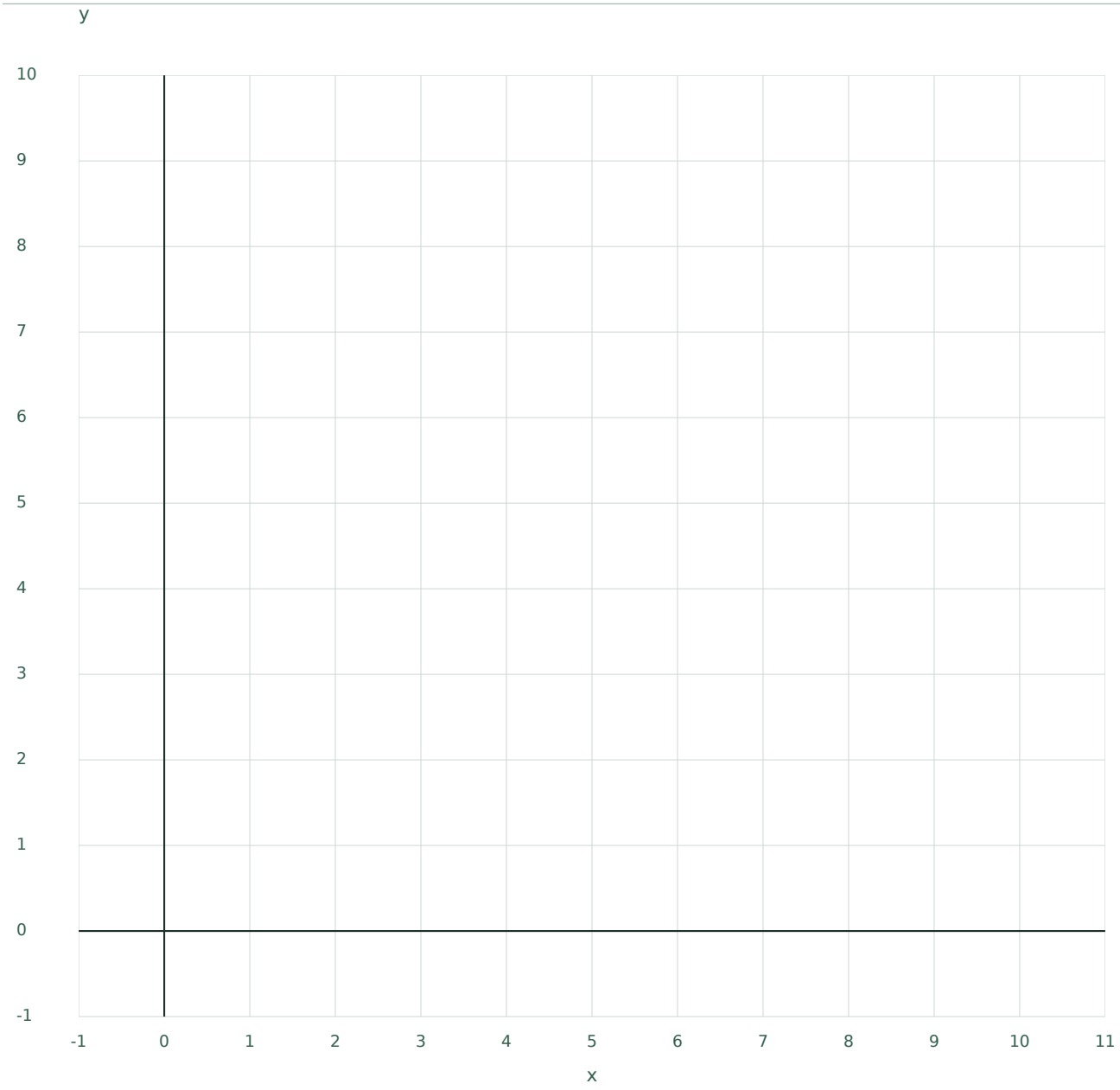
Blank grid 2: plot y = f(x - 2)



Student plotting space for y = f(x - 2).

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

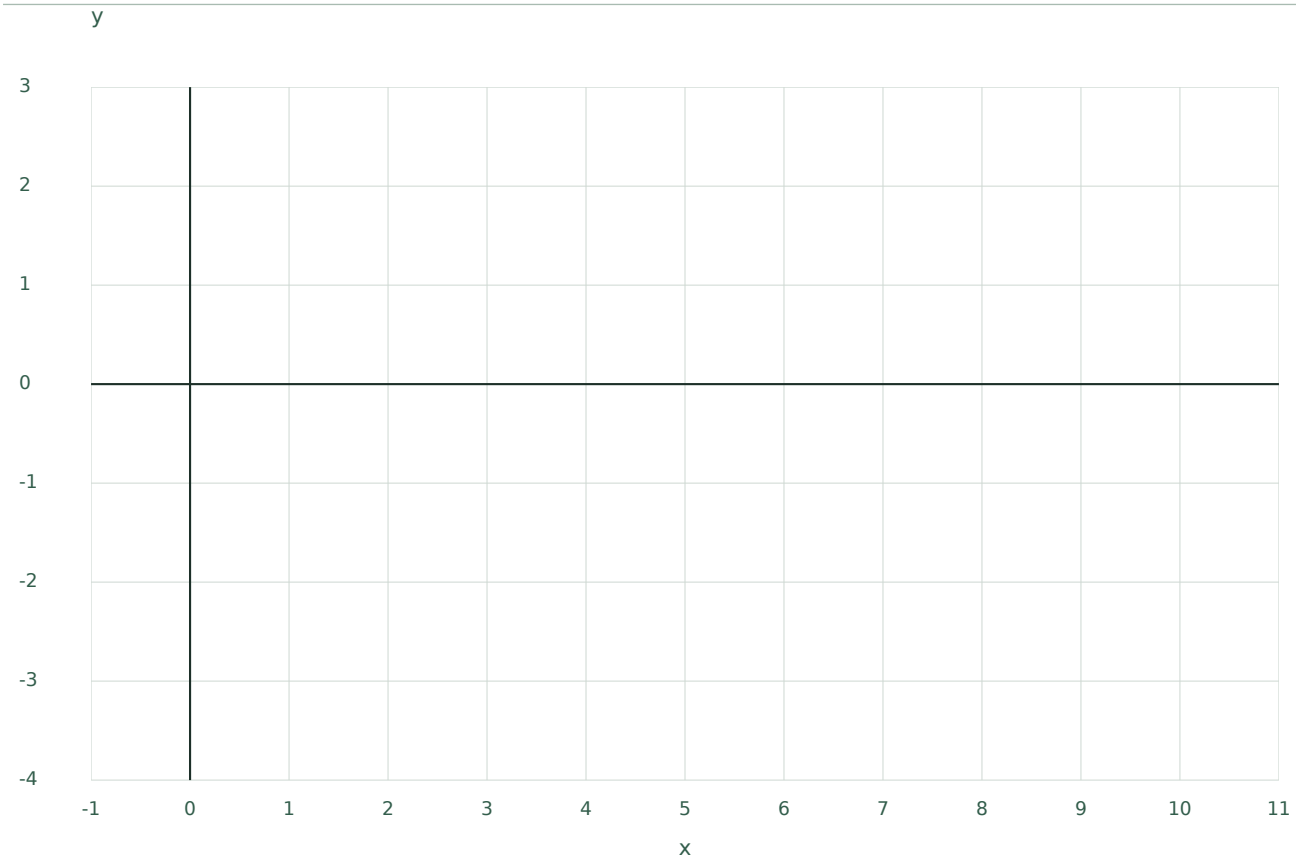
Blank grid 3: plot y = 3f(x)



Student plotting space for y = 3f(x).

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

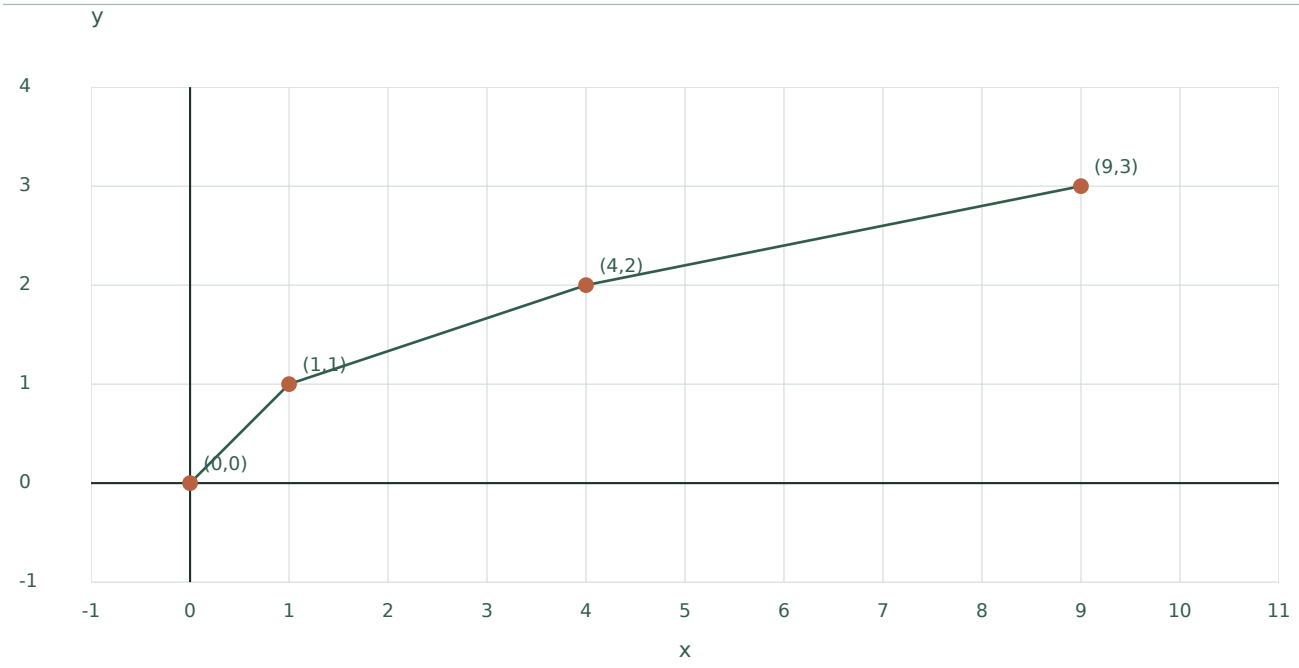
Blank grid 4: plot y = -f(x) + 1



Student plotting space for y = -f(x) + 1.

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

Worksheet: parent function graph



Parent function reference on the worksheet.

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

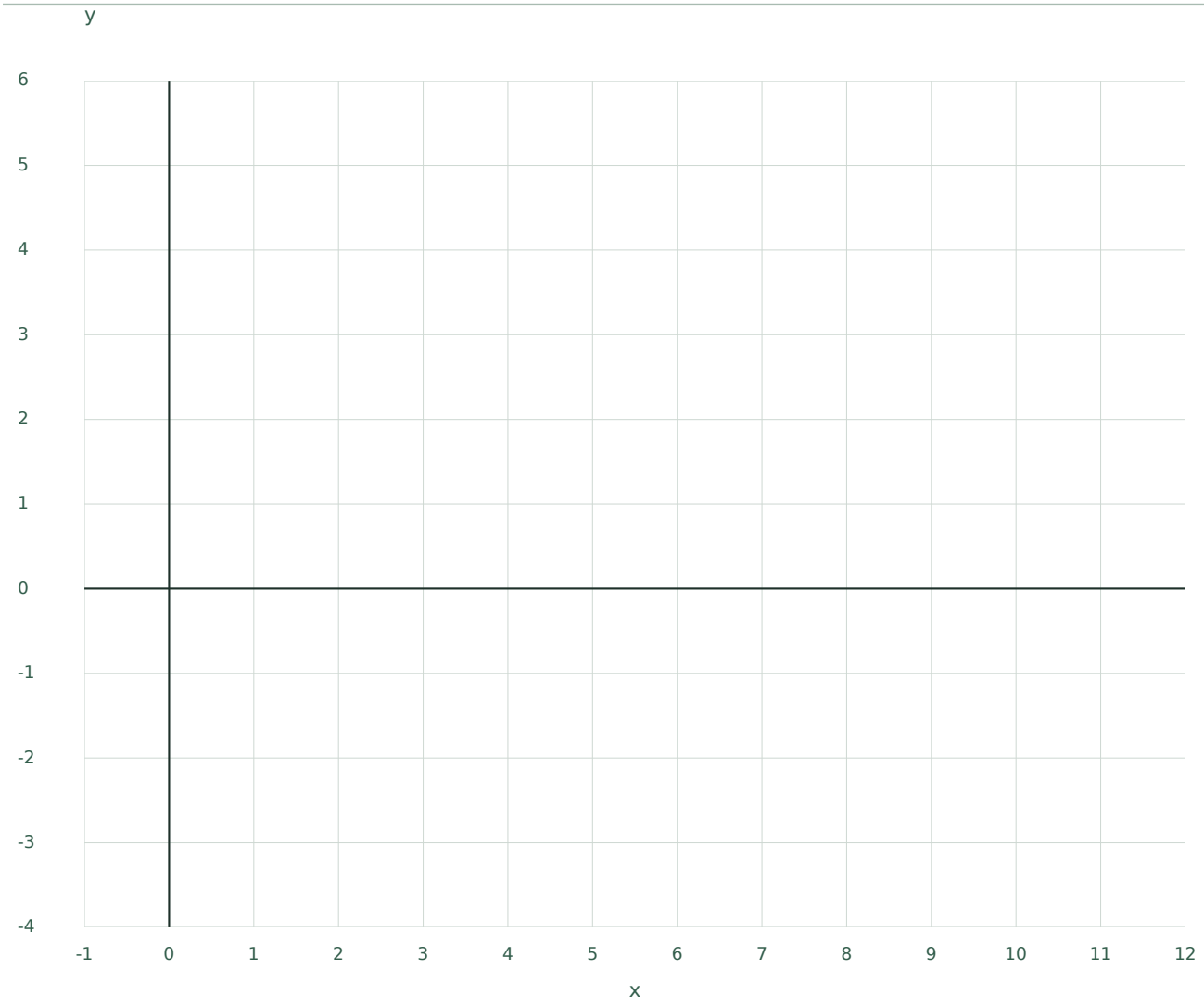
Worksheet: six transformation rules

Six rules to plot and describe in words.

Rule	Describe the change in words
y = -2f(x - 1) + 4	
y = f(x) + 3	
y = f(x - 2)	
y = 3f(x)	
y = -f(x) + 1	
y = f(-x)	

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

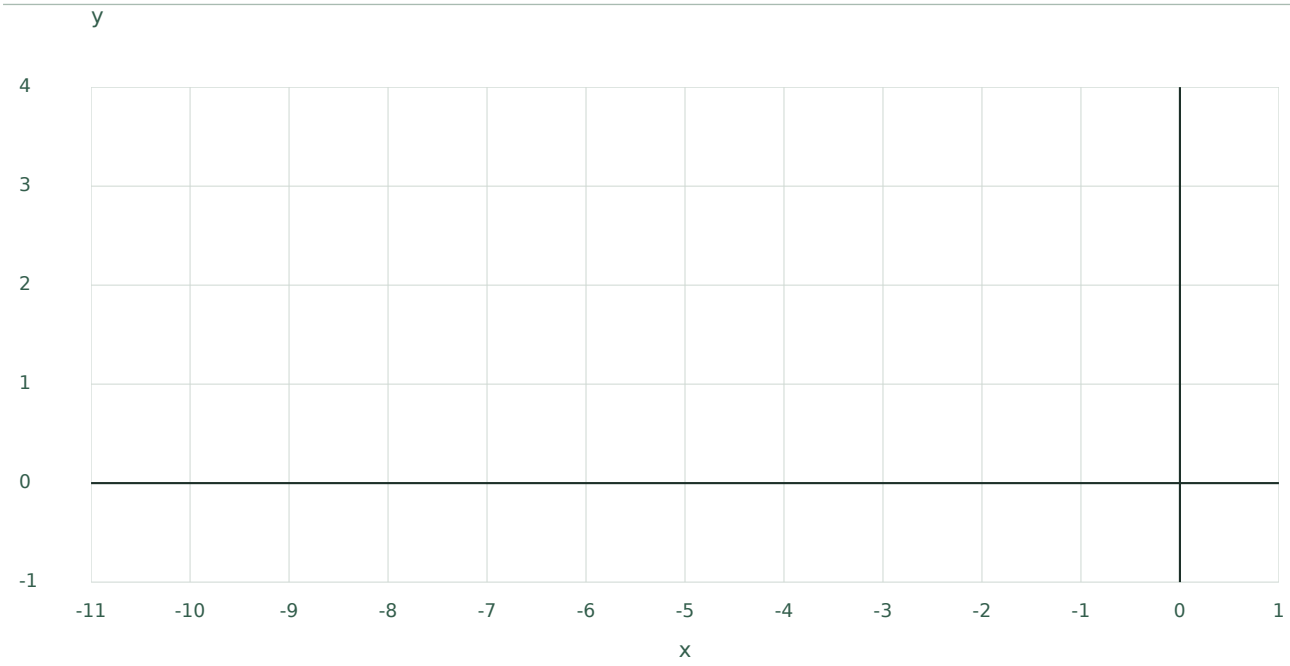
Worksheet grid 1: y = -2f(x - 1) + 4



Student plotting space for y = -2f(x - 1) + 4.

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

Worksheet grid 6: y = f(-x)



Student plotting space for y = f(-x).

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

Original tasks 1, 2, 3 / blank responses

Task 1

Parent y = f(x) has points (0,0), (1,1), (4,2), and (9,3). Plot y = f(x) + 3. List the transformed points.

Task 2

Parent y = f(x) has points (0,0), (1,1), (4,2), and (9,3). Plot y = f(x - 2). List the transformed points.

Task 3

Parent y = f(x) has points (0,0), (1,1), (4,2), and (9,3). Plot y = 3f(x). List the transformed points.

Plot Graph Transformations: Shift, Stretch, and Reflect with Confidence

Original tasks 4 / blank responses

Task 4

Parent y = f(x) has points (0,0), (1,1), (4,2), and (9,3). Plot y = -f(x) + 1. List the transformed points.