

Transformations	Grades 3 & 4
Handout	

(x, y) Coordinates Practice

- Use the coordinates below to draw an image. Remember that the coordinates are written as (x, y).

		X →								
		1	2	3	4	5	6	7	8	9
Y ↓	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

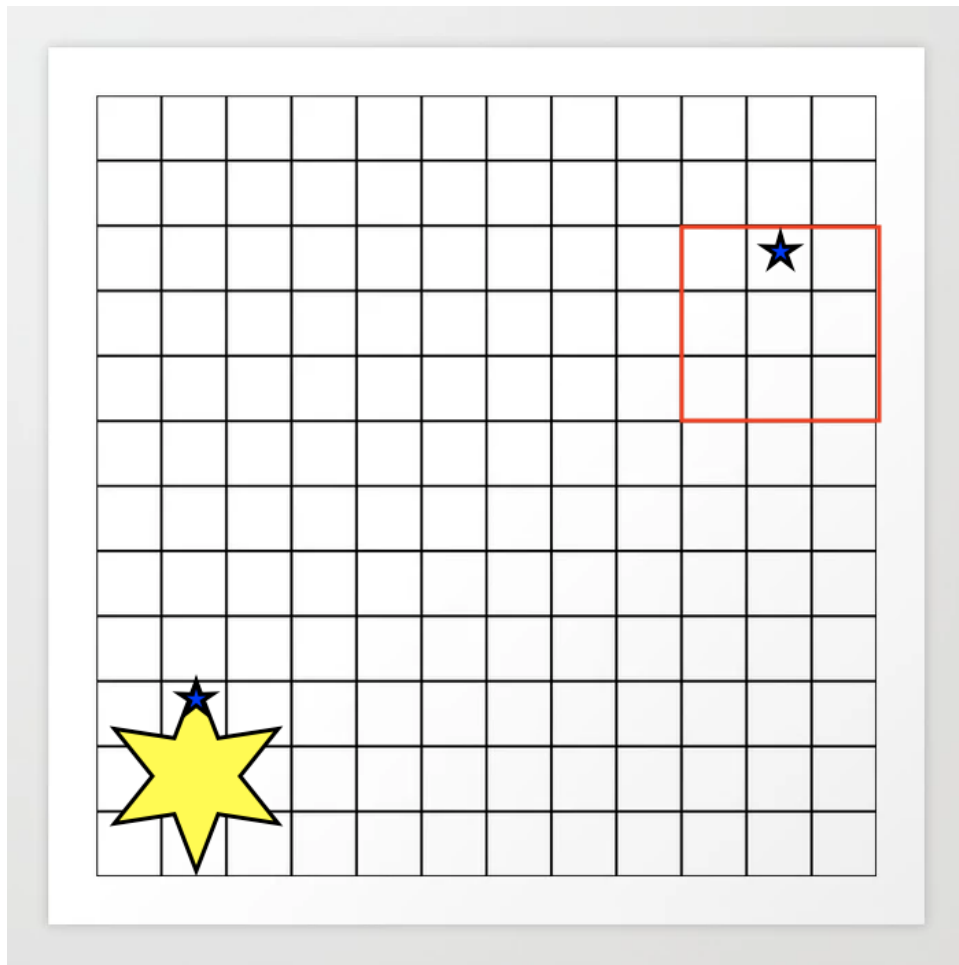
(3, 1) (7, 1) (1, 2) (3, 2) (6, 2) (8, 2) (1, 3) (5, 3) (9, 3) (2, 4) (8, 4) (3, 5) (7, 5) (4, 6)
 (6, 6) (5, 7)

2. Now try to create your own coordinate art. Write the coordinates for each square you filled in below. Remember to use the form (x, y) for your coordinates.

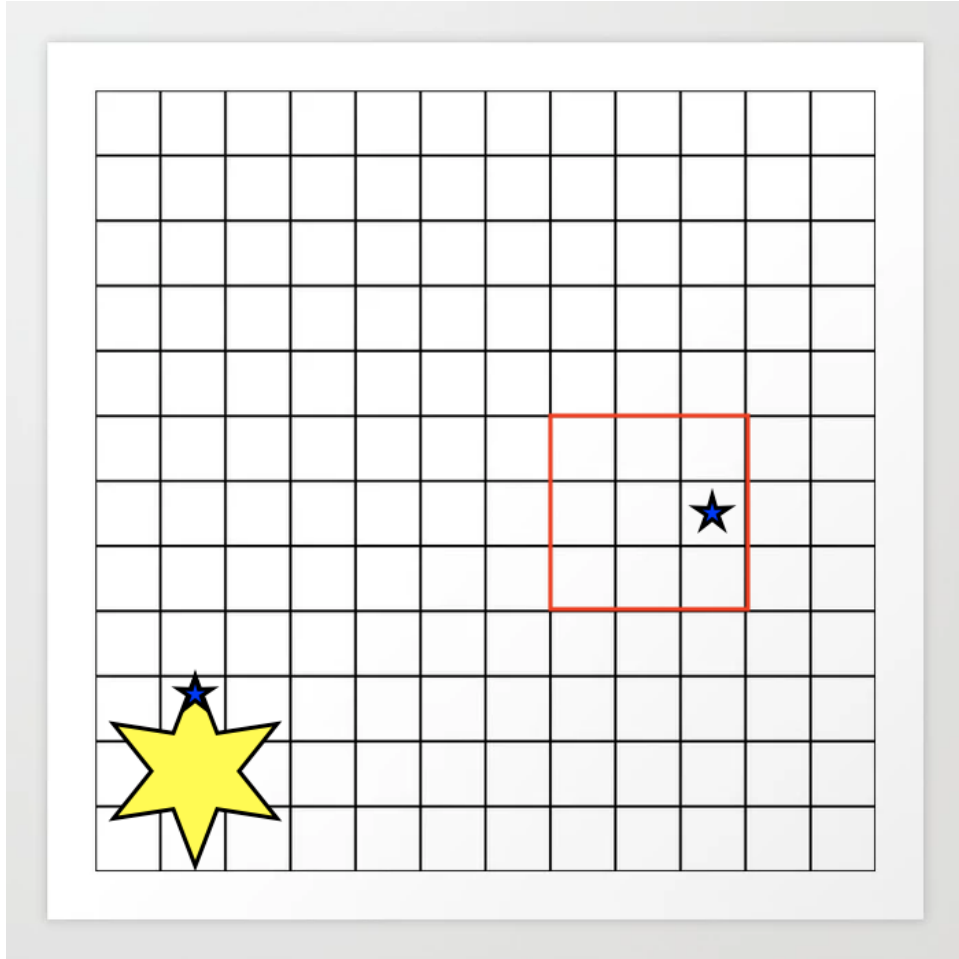
		X →								
		1	2	3	4	5	6	7	8	9
Y ↓	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Transformation Algorithms Practice

3. Describe the steps needed to translate the yellow star so that it is inside the box? Use the point marked by the blue star as your starting point, and the blue star marked inside the box as your ending point.



4. Describe the steps needed to translate and rotate the yellow star so that it is inside the box? Use the point marked by the blue star as your starting point, and the blue star marked inside the box as your ending point.



Transformations	Grades 3 & 4
Answer Key	

Coordinates Practice

1.

		X →								
		1	2	3	4	5	6	7	8	9
Y ↓	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

3. Students can describe the steps for translating the star using sentences or arrows.

Move up seven squares and move right 9 squares

Or: ↑↑↑↑↑↑↑ → → → → → → → → →

4. Students can describe the steps for translating the star using sentences or arrows.

Move up 4 squares; move right 7 squares; rotate ¼ turn (or 90°) clockwise

Or: ↑↑↑↑ → → → → → → → → → 