

Note: Assessment on 9/26 will include both CO-C9a and CO-C9b as review skills

So you can until then to retake those 2

Anything else in Powerschool that is less than 96 should be retaken in DS!!

Growth Mindset: Which are you?



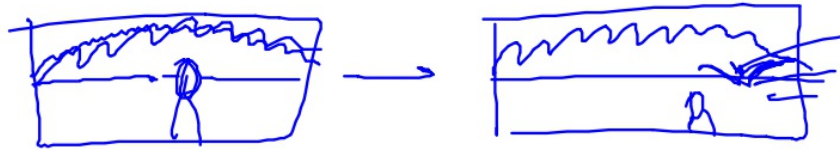
**I can learn anything I want to.
When I'm frustrated, I persevere.
I want to challenge myself.
When I fail, I learn.
Tell me I try hard.
If you succeed, I'm inspired.
My effort and attitude determine everything.**



**I'm either good at it, or I'm not.
When I'm frustrated, I give up.
I don't like to be challenged.
When I fail, I'm no good.
Tell me I'm smart.
If you succeed, I feel threatened.
My abilities determine everything.**

Transformations:

Why study them?



- Computer animation and graphic design
- Motion capture/video games
- Symmetry and art
- Anything that moves is following some transformation(s)

https://en.wikipedia.org/wiki/Vector_graphics

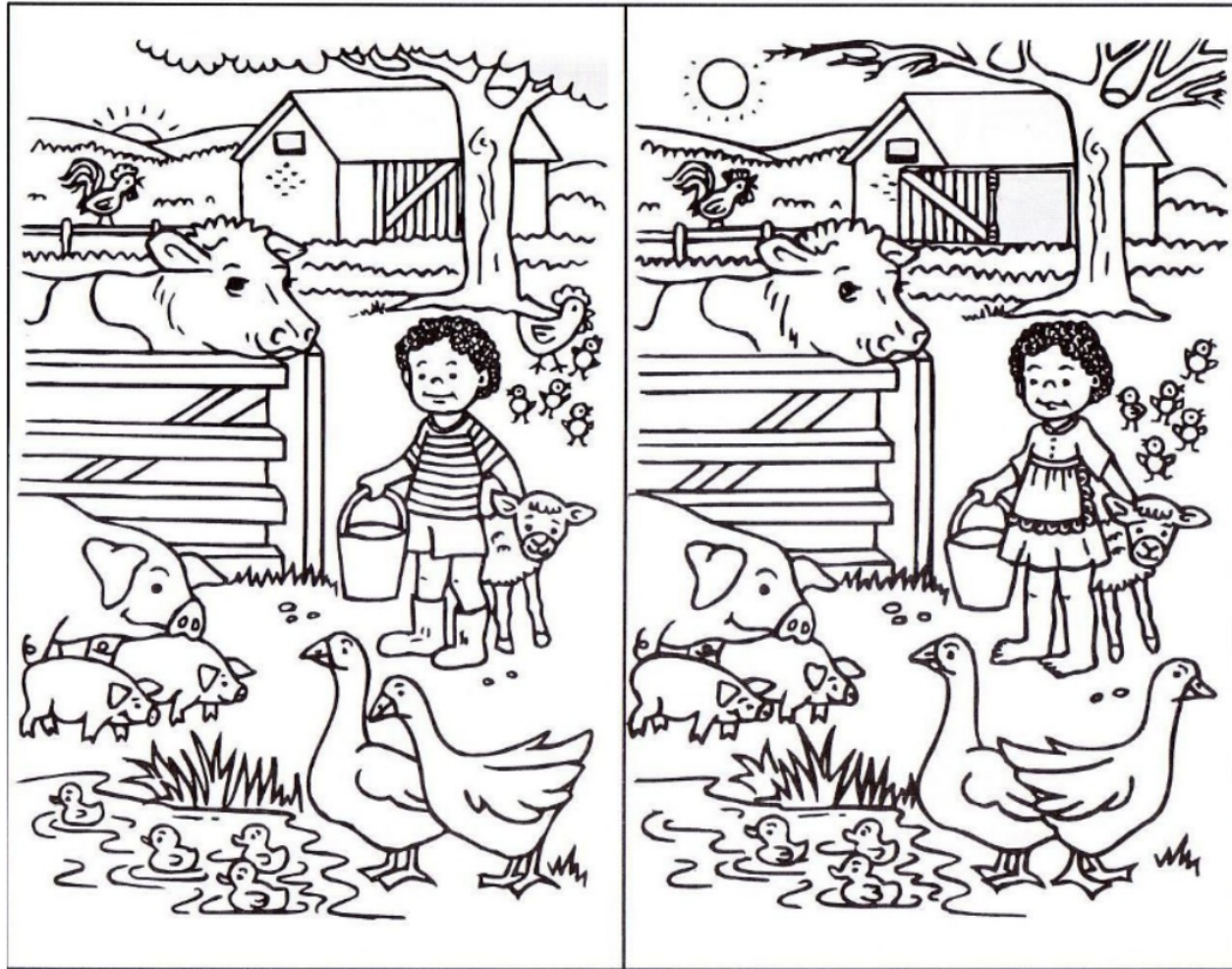
<https://www.youtube.com/watch?v=MHiaNY3idLA>



[search/math-art-er.com/beesandbombs](https://www.math-art.com/search/math-art-er.com/beesandbombs)

Congruence and Isometries

Are these images congruent?



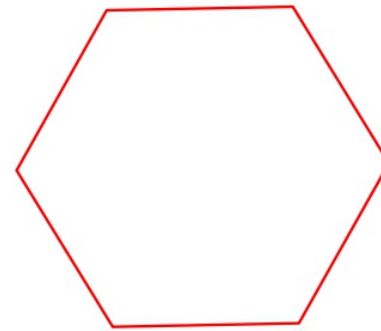
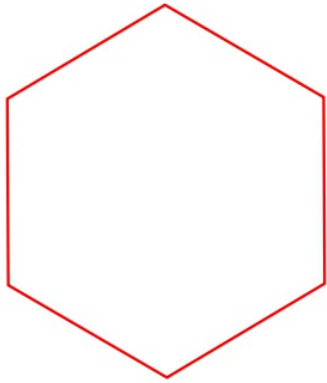
PRIVATELY
spot at least 3
differences

Share with
elbow partner

Think of how
to find ALL
differences at once

(NOTES)

Two figures are congruent if and only if you can show that one figure can be carried onto the other with a sequence of rigid motions (isometries).



Practice with Transformations

Create a coordinate grid and plot+label the points

A(-3,3)

B(-1,1)

C(2,3)

D(0,5)

Apply the transformation $(x,y) \rightarrow (x+4, y-3)$ to each coordinate pair

A'()

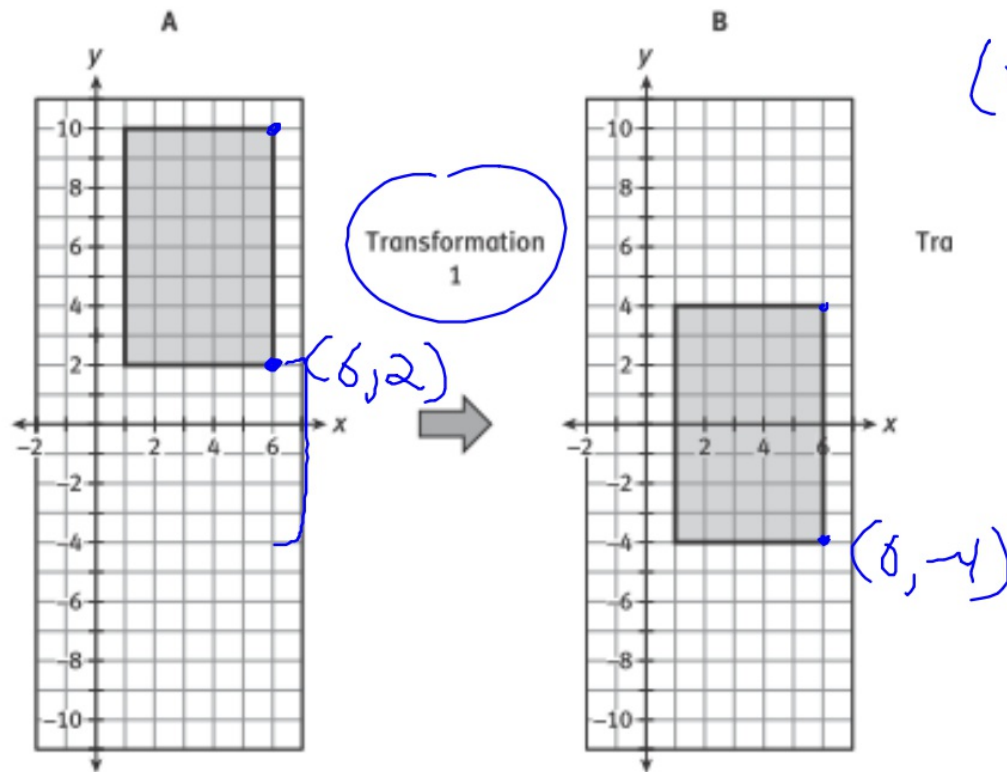
B'()

C'()

D'()

Plot and label the points, connecting them to make the figure. What kind of isometry was performed?

Given two figures, describe a function that carries one figure onto the other
p. 103 bottom of the page, Transformation 1



$$(x, y) \rightarrow (x, y - 6)$$

Remember from the video:

Reflection: a flip across a line

Rotation: a turn through a degree, around a point

Translation: a slide along a vector (direction and magnitude)

Classwork/Homework

Performing and Describing Transformations worksheet

[front is for CO-A5a, back is for CO-A2a]

FYI Next assessment is 9/26