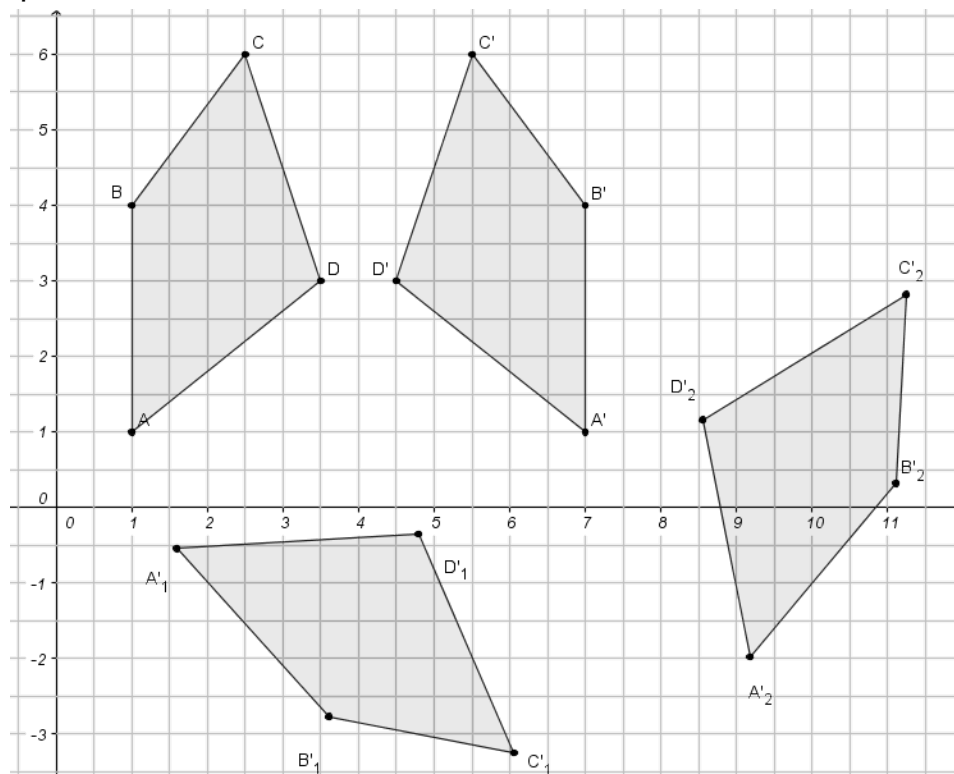


WORKSHEET: REFLECTION

Look at the picture below:



Answer to these questions:

- which figures have the same perimeter as F?
- Which figures have the same areas?

You have a mirror, how can you use it? Try to explain what you observe.

The figures are _____.

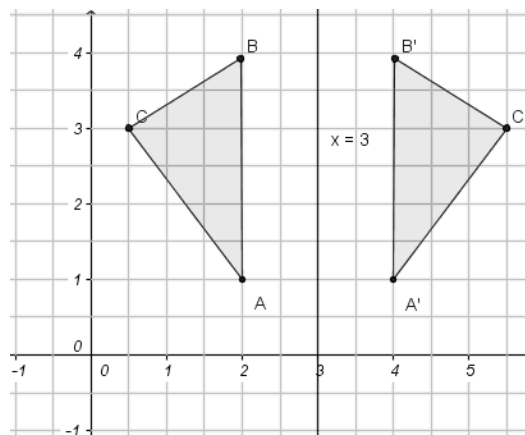
The processes you observed is named REFLECTION OF AN AXIS.

A reflection of an axis is the “flip” of that object over a line, called the line of symmetry.

Lines of reflection can be horizontal, vertical or in any direction.

The initial object is called the pre-image and the object after the translation is called the image.

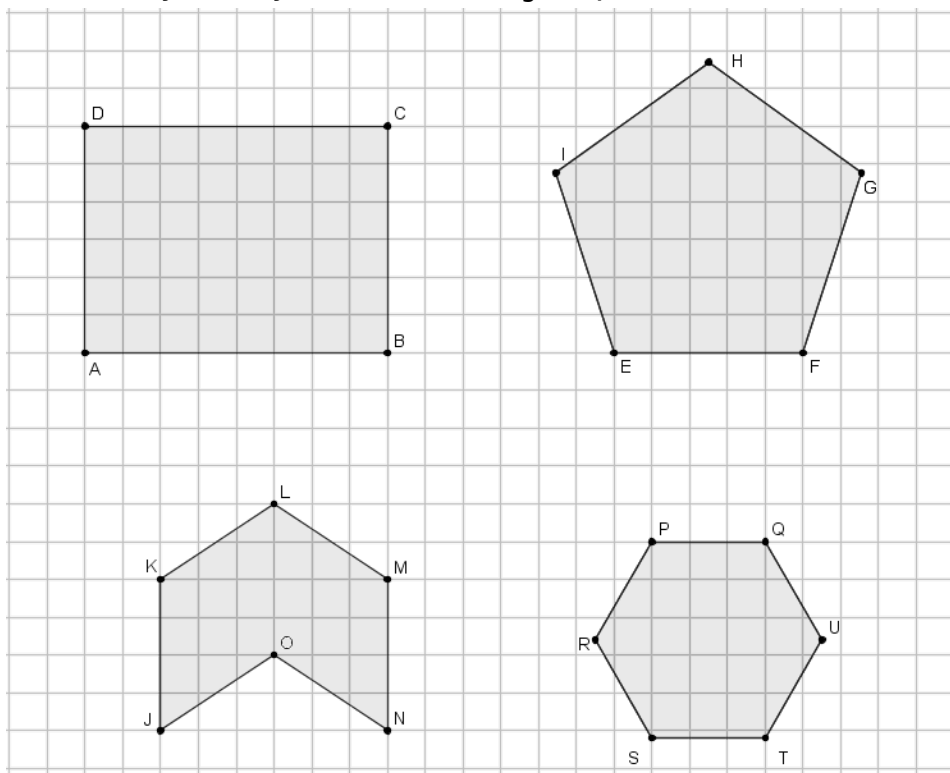
You can write: draw the reflection in the line $x=3$.



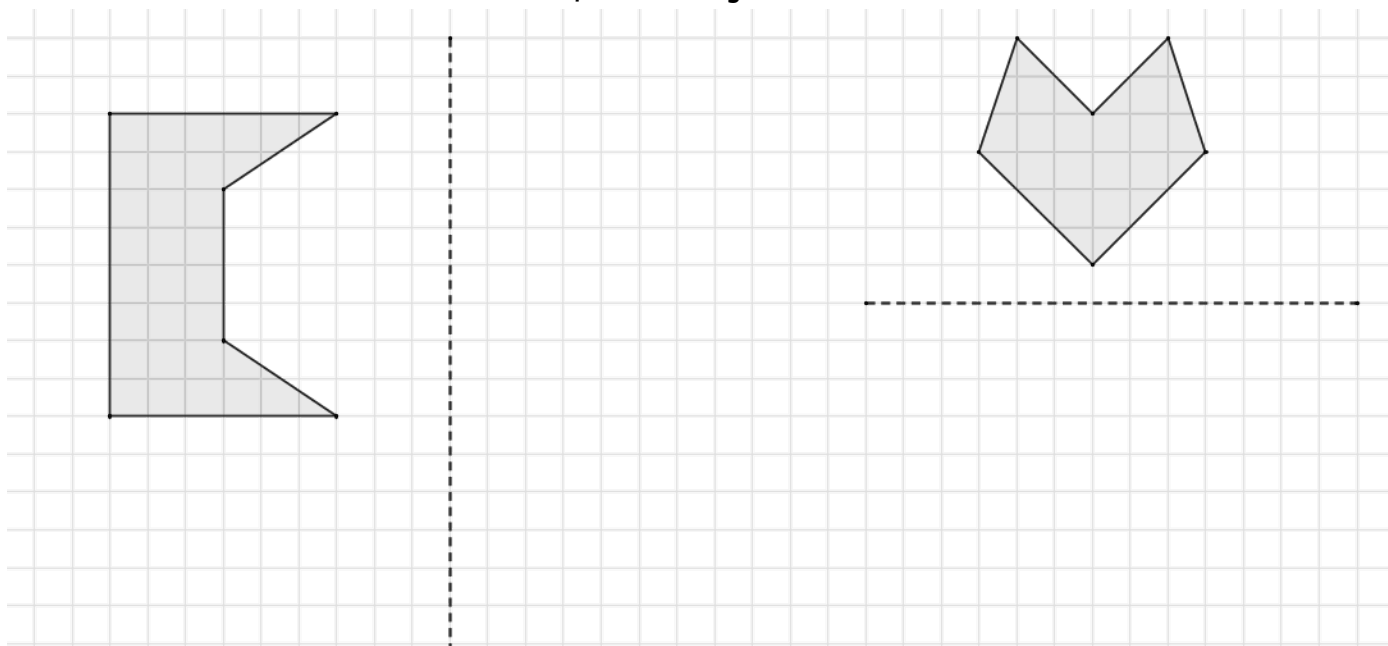
Where can you find reflections in nature of real life?

Exercises:

1. Draw the lines of symmetry for the following shape.



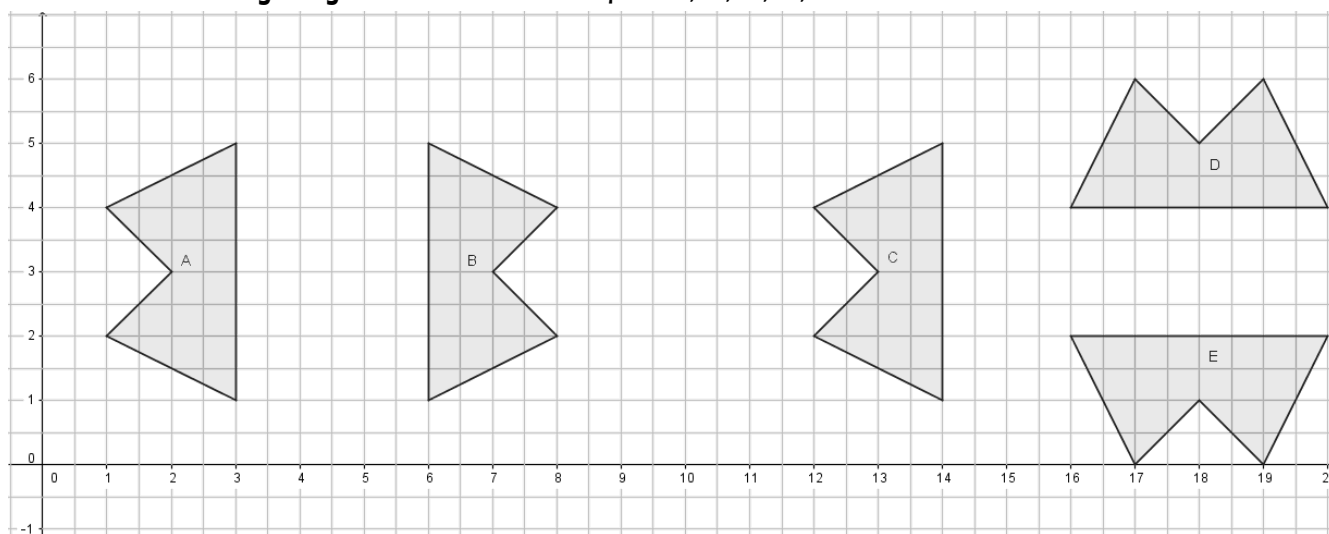
2. Draw the reflections the the shapes in the given mirror line



3. A shape has points with coordinate $A(1/2; 1)$, $B(0; 3)$, $C(1/2; 4)$ and $D(3/2; 3)$. Draw the reflection of the shape in the lines:

- $y=x$
- $x=-1$
- $y=-1/2$

4. The following diagram shows the shapes A, B, C, D, E:



write the equations of the mirror line for each of the follow reflection:

- A to B;
- E to D;
- C to B;
- B to C.

5. Construct a map to explain the reflection to your classmates.