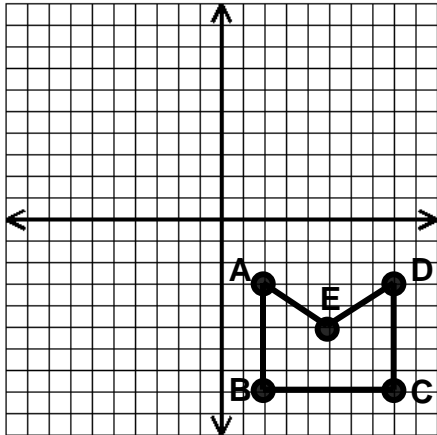


TRANSLATIONS

Show Video : Motion Geometry

TRANSLATIONS

EXAMPLE 1: Translate the figure left 6 and up 8 or $(x - 6, y + 8)$.
Give the coordinates of the new points.



A' (_____, _____)

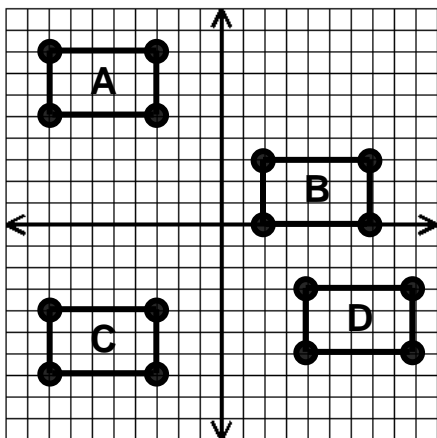
B' (_____, _____)

C' (_____, _____)

D' (_____, _____)

E' (_____, _____)

EXAMPLE 2: Describe each as an ordered pair translation



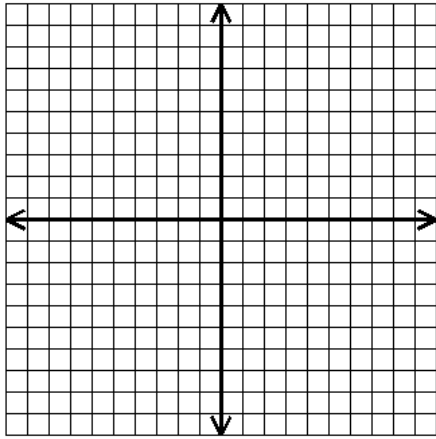
1) A to B: _____

2) B to D: _____

3) D to C: _____

Three-dimensional figures can be made using translations...

EXAMPLE 3: Plot the points $A(-4, -4)$, $B(-4, 1)$, $C(1, 1)$, $D(1, -4)$.

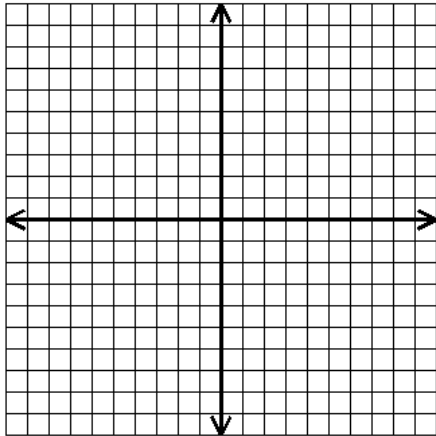


- 1) Connect the points in order.
- 2) Translate the figure 4 units right and 3 units up.
- 3) Draw segments AA' , BB' , CC' , and DD' .
- 4) What type of figure have you made?

EXAMPLE 4: Using the figure you generated in EXAMPLE 3, find the following:

- a) intersection of $ABB'A'$ and $A'B'C'D'$: _____
- b) intersection of $ABCD$ and $\overline{CC'}$: _____
- c) Name a segment skew to \overline{BC} : _____
- d) Find the equation of the line containing $\overline{C'D'}$:

EXAMPLE 5: What is the image of the point $A(2,3)$ under the translation that shifts (x,y) to $(x - 2, y + 4)$?



EXAMPLE 6: A translation moves $B(-1, 4)$ onto $B'(0, -6)$. What is the image of $C(-2, -5)$ under that same translation.

