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## Transformations

orientation


#### Abstract

vertically


clockwise
represent
pre-image
rotations
dilations
symmetry
location
graphing
congruent
position
parallel
polygon
affect
center
origin
vertex
image


| X |  | P | H | 0 | F | D | D | H | M | 0 | L | 0 | C | A | T | I | 0 | N |  | B | P | M | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | M | E | L | E |  | B | C | 0 | N | G | R | U | E | N | T | S | I | R | G | E | S | E | Y |
| N | C | R | S | R | S | V | E | R | T | I | C | A | L | L | Y |  | P | 0 | S | B | M | N | P |
| I | A | H | E | 1 | K | 1 | Z | C | C | S | F | W | Z | R | L | C | S | T | W | I | E | 0 | X |
| D | V | U | G | M | W | E | W | U | 0 | 1 | C | 0 | C | U | F | N | C | A | F | M | L | L | R |
| N | G | E | M | B | G | K | X | K | X | 0 | D | I | R | W | 0 | S | L | T | S | Y | M | R | Y |
| 0 | S |  | R | L | E | Y | C | E | C | Y | R |  | X | 1 | G | D | F | 1 | G | Z | N | E | 1 |
| P | H | Y | I | T | A | R | D | 0 | P | 0 | V | D | T | K | E | U | G | 0 | D | S | 0 | F | L |
| S | V | L | M | N | E | P | H | X | L | B | L | A | I | Z | V | N | N | N | X | W | I | L | Y |
| E | K | 0 | G | M | 0 | X | W |  | K | C | L | C | F | N | C | H | T | S | E | K | T | E |  |
| R | B | Z | Z | 1 | E |  | N | 1 | G | 1 | R | 0 | R | P | A | G | C | A | N | E | A | C | S |
| R | 0 | W | N | M | Z | T | E | N | D | P | U | R | W | E | H | T | C | N | T | W | M | T | R |
| 0 | A | T | P |  | B | G | R | A | P | H | I | N | G |  | T | F | E | N | Z | 1 | R | I | U |
| C |  | T | T | B | R | Z | P | Y | X | H | U | T | H | W | W | N | A | P | L | X | 0 | 0 | X |
| P | A | R | A | L | L | E | L | V |  | M | Y | T | B |  | Y | W | U | B | L | M | F | N | Z |
|  | T | N | E | S | E | R | P | E | R | B | V | V | 0 | Z | B | E | E | 0 |  | A | S | S | A |
| T | R | A | N | S | L | A | T | 1 | 0 | N | S | R | C | C | X | W | S | E | C | K | N |  |  |
| L | Z | 1 | B | V | N | S | U | C | A | Y | S | K | T | $X$ | E | Y | G | T | P | B | A | E | K |
| K | A | X | A | R | C | E | A | H | 0 | R | I | Z | 0 | N | T | A | L | L | Y |  | R | V |  |
| M | L | Y | U | T | N |  | R | E | T | N | E | C | B | R | M | V | G | B | R | C | T | A | F |
| R | A | L | U | C | 1 | D | N | E | P | R | E | P | I | I | W | A | X | F | G | L | A | X | K |
| D | M | C | R | D | D | Y | F | B | C | B | S | F | E | G | G | P | 0 | S | I | T | I | 0 | N |
| A | D | T | E | G | A | M | 1 | K | Y | W | A | R | S | H | A | F | F | E | C | T |  | U | T |
| W | F | B | F | Z | U | V | E | R | X | 0 | P |  | N | 0 | 1 | T | A | N | I | B | M | 0 | C |

