

M\$5 Homework 44

1. Which of the following is not an isometry?
(1) line reflection (3) dilation
(2) point reflection (4) rotation

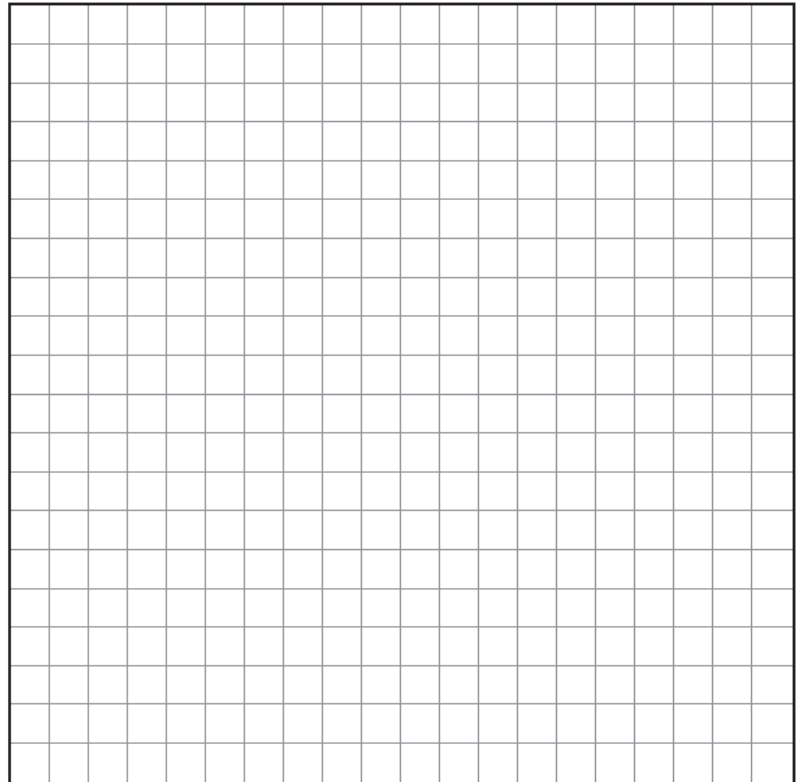
2. Which of the following words has point symmetry?
(1) pop (3) mom
(2) pod (4) oz

3. Which of the following transformations could map the point (1, 2) onto the point (3, 6)?
(1) $T_{2,3}$ (3) D_3
(2) $T_{3,2}$ (4) $r_{y=x}$

4. If the point (0, -4) is rotated 90° clockwise about the origin, its image is on the line
(1) $y = x$ (3) $x = 0$
(2) $y = -x$ (4) $y = 0$

5. a) Sketch the graph of
$$\frac{(x-3)^2}{4} + \frac{(y+2)^2}{9} = 1$$

b) Reflect the given graph in the x -axis and write its new equation.
c) Translate the given graph by $T_{-4,6}$ and state the new equation.



6. Which transformation is an opposite isometry?
(1) dilation (3) rotation of 90°
(2) line reflection (4) translation
7. Which symbol has both point and line symmetry?
(1) ♣ (3) ♥
(2) ♦ (4) ♠
8. In which quadrant would the image of point $(4, 5)$ fall after a dilation using a factor of -3 ?
(1) I (3) III
(2) II (4) IV
9. What are the coordinates of $r_{x=4} \circ r_{y=3}(2, 5)$?
10. The composite transformation that reflects point P through the origin, the x -axis, and the line $y = x$, in the order given, is equivalent to which rotation?
(1) R_{90° (3) R_{270°
(2) R_{180° (4) R_{360°