Extra Practice 6 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Master 7.28

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| Lesson 7.6 Line and Rotational Symmetry  u07_m26-t41u07_m26-t39u07_m26-t40u07_m26-t38**1.** Which polygons have rotational symmetry? State the order of rotation and the angle of rotation symmetry for each. **a) b) c) d)**  u07_m26-t42**2.** Draw the rotation image for each rotation of quadrilateral ABCD. Rotate quadrilateral ABCD clockwise about vertex D by:  **a)** 60° **b)** 120° **c)** 180°  **d)** 240° **e)** 300°  Consider the larger shape formed by quadrilateral ABCD and these rotation images. Describe the symmetry of this shape.  **3.** What is the order of rotation and the angle of rotation symmetry, if any, for:  **a)** an equilateral triangle **b)** a regular polygon with 9 sides  **c)** a kite that is not a rhombus **d)** the plus sign +  **4.** Plot the kite FISH on a coordinate grid.  The vertices of FISH are F(3, 4), I(5, 2), S(3, 1), H(1, 2).  Rotate the kite FISH:  **a)** 90° clockwise about vertex F  **b)** 180° about vertex F  **c)** 270° clockwise about vertex F  Draw each rotation image.  Look at the shape formed by the kite and its rotation images.  Write the coordinates of this shape. F( , ) I( , ) S( , ) H( , )  Describe any rotational symmetry in this shape.  u07_m26-t43**5.** Draw the rotation image for each  transformation of quadrilateral ABCD.  **a)** 180° about vertex B  **b)** 90° clockwise about vertex A  **c)** 90°counterclockwise about point E |