Date: _____

1.1 Line Symmetry

***MathLinks 9*, pages 6–15**

Key Ideas Review

Decide whether each of the following statements is true or false. Circle the word True or False. If the statement is false, rewrite it to make it true.

1. **True/False** A strategy for completing a symmetric drawing is folding one half in the line of symmetry.

2. **True/False** An isosceles triangle has no line of symmetry.

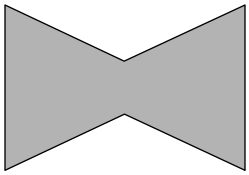
3. **True/False** You can find a line of symmetry using a grid.

4. **True/False** A shape that has a line of symmetry is asymmetrical.

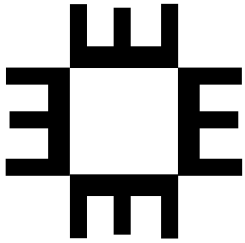
5. **True/False** A curved shape cannot have lines of symmetry.

Check Your Understanding

6. Draw two lines of symmetry in the following figure.



7. Use the first letter of your name or use a number to create a design that uses at least two lines of symmetry. Example:



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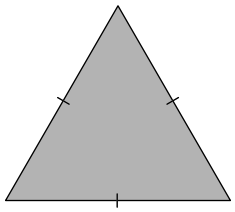
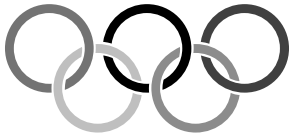
8. How many lines of symmetry does an equilateral triangle have? Show them.



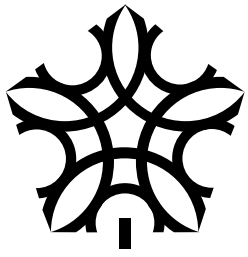
9. **a)** How many lines of symmetry does a square have? Show them.

b) How many of the lines are oblique?

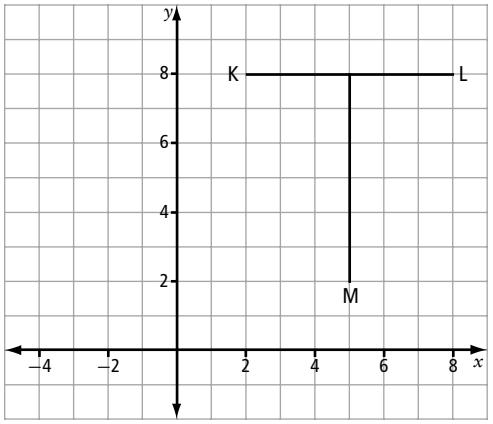
10. **a)** The Olympic rings are a symbol based on five circles. Draw the line or lines of symmetry. How many are there?



b) When the 1988 Winter Olympic Games were held in Calgary, the organizers used the Olympic rings to create a new design. Draw the line or lines of symmetry. How many are there?



11. Use the coordinate grid to complete the following questions.



a) What are the coordinates of figure KLM?

b) Translate the figure 6 units to the left.

c) What are the coordinates of the new figure K'L'M'?

d) Do the original figure and the translated figure show symmetry with each other? Explain.

e) For the combined image of the original figure and the translated figure, where is the line of symmetry?