



Homework 14-9

Line Symmetry

Another Look!

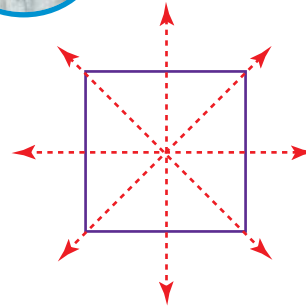
Symmetric figures are figures that can be folded to make two halves that match each other.



How many lines of symmetry does a square have?

Step 1

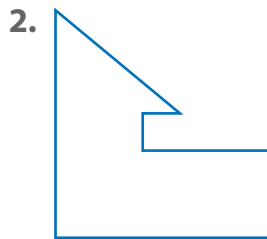
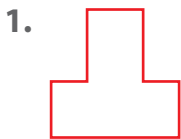
If you fold the square along any of the 4 dashed lines, the two halves will lie on top of each other.



Step 2

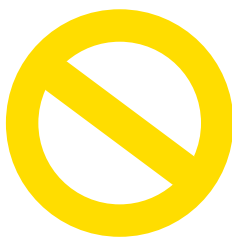
A square has 4 lines of symmetry.

In 1 through 4, tell how many lines of symmetry each figure has.

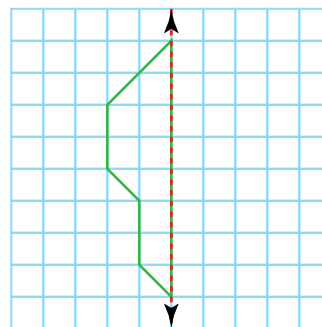


5. **Reason** How many lines of symmetry does the letter R have?

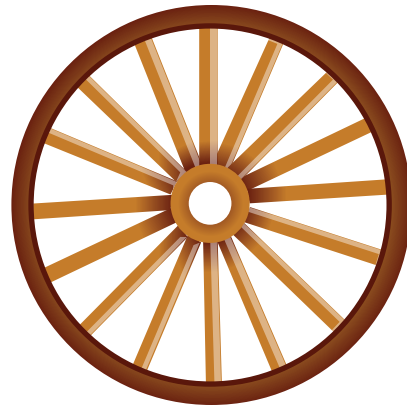
6. Draw all of the lines of symmetry for the figure.



7. **Draw a Picture** Complete the drawing so that the figure is symmetric.



8. **Reason** How many lines of symmetry does the wagon wheel at the right have? Draw or explain where the lines of symmetry are.



9. Draw a figure with exactly 2 lines of symmetry.

Think about what the word "exactly" means.



10. **Math and Science** Animals are consumers in a food web. Animals depend on plants or other animals for food. Elephants are called herbivores because they eat only plants. An adult elephant in the wild may eat 150 kilograms of grass and other plants in one day. How many grams is this?


11. Which of the letters has exactly 2 lines of symmetry?



- A M
- B A
- C T
- D H

12. **Extend Your Thinking** Regular polygons have sides that are all the same length and angles that all have the same measure. An equilateral triangle and a square are regular polygons. How does the number of sides of a regular polygon relate to the number of lines of symmetry the figure has?

13. **Explain** How can you tell when a line is **NOT** a line of symmetry?

14. **Personal Financial Literacy**  Stewart wants to buy two tickets to a soccer match. The tickets cost \$15.75 each. Stewart has \$25.73. How much more money does he need? Tell how you found the answer.