Illustrative Mathematics

Grade 4 Unit 8 Lesson 5 CC BY 2021 Illustrative Mathematics®

Unit 8 Lesson 5: Symmetry in Figures (Part 2)

WU Number Talk: Keeping Track (Warm up)

Student Task Statement

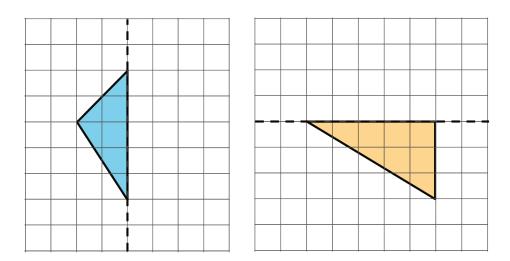
Find the value of each expression mentally.

- 43 + 57 + 50 + 7 + 3 + 40
- 243 + 57 + 43 + 257
- 1,043 + 257 + 57 + 200 + 43 + 1,000
- 1,943 + 257 + 1 + 257 + 1,000 + 943

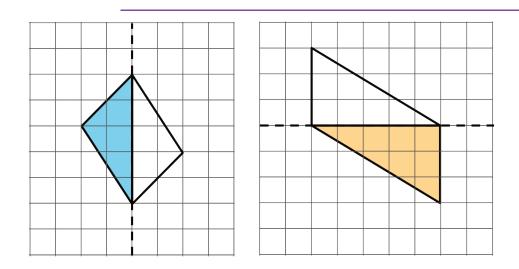
1 Half-drawn Figures

Student Task Statement

Each shaded triangle is half of a whole figure that has a line of symmetry shown by the dashed line.



Clare drew in some segments to show the missing half of each figure.

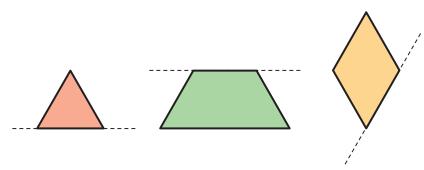


Do you agree that the dashed line is a line of symmetry for each figure Clare completed? Explain your reasoning. If you disagree with Clare's work, show a way to complete the drawing so the dashed line is a line of symmetry.

2 What's the Whole Picture?

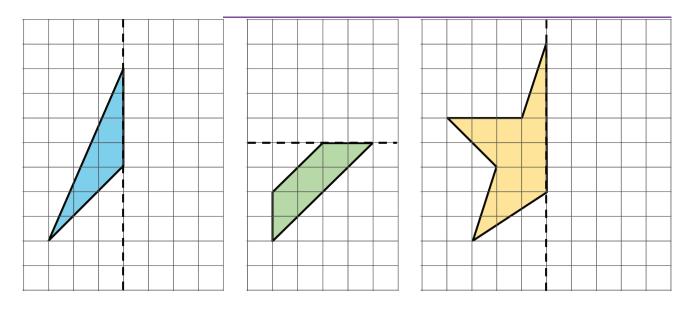
Student Task Statement

1. Here are three figures. Each figure is half of a whole figure. The dashed line is a line symmetry of that figure.

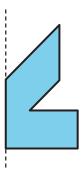


Use patty paper to help you draw the whole figure.

2. Each figure on the grid is half of a whole figure that has a line of symmetry. The dashed line shows the line of symmetry. Use the grid to help you draw the whole figure. Be as precise as possible.



3. Here is another figure that is half of a whole figure with a vertical line of symmetry. Draw the whole figure. Be as precise as possible.



3 What Could the Whole Figure Be? (Optional)

Student Task Statement

Trace a triangle cutout from your teacher.

If the triangle is half of a whole figure that has line symmetry, what could the whole figure look like? Can you show two possibilities? Three possibilities?

Images for Activity Synthesis

