Name $\qquad$ Date $\qquad$

1. Three shapes are shown below.
a. Circle the shape(s) with only one pair of parallel sides.
b. Cross out the shape(s) with two pairs of parallel sides.

c. Which of the three shapes are quadrilaterals? Explain how you know.
2. Use your ruler and right angle tool to draw the following shapes.
a. Draw and name a shape with four right angles.
b. Draw a four-sided shape with no right angles and no equal sides. Label the side lengths.
c. Draw triangles to create a rhombus. Label the side lengths.
3. Mr. Cooper builds a fence to make a rectangular horse stall. The stall is 5 meters long and 7 meters wide. How many meters of fence does Mr. Cooper use? Draw a picture and write an equation to show your thinking.
4. Jamal wants to put wood trim around his rectangular bedroom and square closet. His bedroom is 10 feet wide and 8 feet long. His closet is 3 feet wide and 3 feet long.

a. Wood trim is sold by the foot. How many feet of wood trim does Jamal need to go around his bedroom and closet? Show your work.
b. How much more wood trim does Jamal need for his bedroom than his closet? Write and solve an equation. Use a letter to represent the unknown.
5. The figure below is composed of rectangles. Use the picture and the descriptions to find the perimeter of the shape. Show your work.

- Each side labeled with $\mathbf{A}$ is 6 inches.
- Each side labeled with $\mathbf{B}$ is 3 inches.
- Each side labeled with $\mathbf{C}$ is 8 inches.


6. Mrs. Gomez builds a fence around her backyard. Her plan shows the fence as a dotted line below.


Together, the garage and backyard make a rectangle. The fence goes only where there is a dotted line. How many feet of fence does Mrs. Gomez need to build? Show your work.

Solve problems involving the four operations, and identify and explain patterns in arithmetic.
3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order [Order of Operations].)
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.
Reason with shapes and their attributes.
3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

## Evaluating Student Learning Outcomes

A Progression Toward Mastery is provided to describe steps that illuminate the gradually increasing understandings that students develop on their way to proficiency. In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for each student is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the student CAN do now and what they need to work on next.

A Progression Toward Mastery

| Assessment <br> Task Item <br> and <br> Standards <br> Assessed | STEP 1 <br> Little evidence of reasoning without a correct answer. <br> (1 Point) | STEP 2 <br> Evidence of some reasoning without a correct answer. <br> (2 Points) | STEP 3 <br> Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points) | STEP 4 <br> Evidence of solid reasoning with a correct answer. <br> (4 Points) |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ \text { 3.G. } 1 \end{gathered}$ | One answer is correct. | Two answers are correct. <br> OR <br> All answers are correct, but there is no explanation in Part (c). | All answers and explanations in Part (c) are correct. <br> Explanation in Part (c) may include information that reveals a possible misconception about the properties of quadrilaterals, e.g., a statement that each shape has at least one set of sides that do not intersect. | All answers are correct. <br> a. The trapezoid is circled. <br> b. The rhombus and rectangle are crossed out. <br> c. All three shapes are quadrilaterals. Explanation includes that they each have four sides. |
| $2$ $\text { 3.G. } 1$ | Student answers one or fewer problems correctly. | Student correctly answers Part (a) and Part (b). | Student correctly draws all three shapes and names the shapes in Parts (a) and (b). Side lengths in Parts (b) and (c) may or may not be labeled. | All answers are correct and appropriate work is shown. Student: <br> a. Draws and names a shape with four right angles (e.g., a rectangle). <br> b. Draws and labels side lengths of a four-sided shape with no right angles and no equal sides (e.g., a trapezoid). <br> c. Draws and labels side lengths of a rhombus using triangles (may use more than two triangles). |



|  |  |  |  | multiplication and <br> addition to calculate <br> the perimeter). |
| :---: | :--- | :--- | :--- | :--- |
| $\mathbf{6}$ |  | Answer is correct but <br> there is no work. <br> OR <br> Work demonstrates an <br> inappropriate strategy <br> for the problem and <br> the answer is incorrect. | Work demonstrates a <br> strategy appropriate to <br> the problem but <br> several calculation <br> errors result in an <br> incorrect answer. | Answer may be <br> incorrect due to a <br> calculation error. <br> Student work <br> demonstrates a <br> strategy appropriate to <br> the problem. | | Student answers that <br> Mrs. Gomez needs to <br> build 85 feet of fence. <br> Student work <br> demonstrates a <br> strategy appropriate to <br> the problem (e.g., 10 + <br> $15=25$ and $25+32+$ <br> $15+10=85$ feet, or, <br> $25+50+10=85$ feet). |
| :--- |

Name $\qquad$ Date $\qquad$

1. Three shapes are shown below.
a) Circle the shapes) with only one pair of parallel sides.
b) Cross out the shapes) with two pairs of parallel sides.

c) Which of the three shapes are quadrilaterals? Explain how you know.

All three shapes are quadrilaterals because they all have four sides.
2. Use your ruler and right angle tool to draw the following shapes:
a) Draw and name a shape with four right angles.

b) Draw a four-sided shape with no right angles and no equal sides. Label the side lengths.

c) Draw triangles to create a rhombus. Label the side lengths.

3. Mr. Cooper builds a fence to make a rectangular horse stall. The stall is 5 meters long and 7 meters wide. How many meters of fence does Mr. Cooper use? Draw a picture and write an equation to show your thinking.

$5 m+5 m+7 m+7 m=24 m$ Mr. Cooper uses 24 m of fence.
4. Jamal wants to put wood trim around his rectangular bedroom and square closet. His bedroom is 10 feet wide and 8 feet long. His closet is 3 feet wide and 3 feet long.

a. Wood trim is sold by the foot. How many feet of wood trim does Jamal need to go around his bedroom and closet? Show your work.

$16+20=36+6=42$ feet He needs 42. feet of wood trim.
b. How much more wood trim does Jamal need for his bedroom than his closet? Write and solve an equation. Use a letter to represent the unknown.


Heneeds 24 more feet for the bedroom.
5. The figure below is composed of rectangles. Use the picture and the descriptions to find the perimeter of the shape. Show your work.

- Each side labeled with $\mathbf{A}$ is 6 inches.
- Each side labeled with $\mathbf{B}$ is 3 inches.
- Each side labeled with $\mathbf{C}$ is 8 inches.


The perimeter is 52 inches.
6. Mrs. Gomez builds a fence around her backyard. Her plan shows the fence as a dotted line below.


Together, the garage and backyard make a rectangle. The fence goes only where there is a dotted line. How many feet of fence does Mrs. Gomez need to build? Show your work.


Mrs. Gomez needs to build 85 feet of fence.

