Perimeter Claim Check

Add every side, then test each claim.

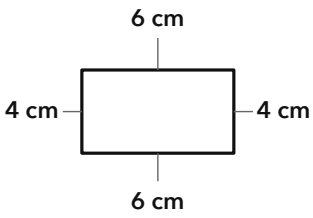
3.MG.2.b.iii "Solve problems, including those in context, involving perimeter: given the lengths of all sides of a polygon (with no more than six sides), determine its perimeter and justify the measurement."

NAME _____ DATE _____

CORRECT PERIMETER

Add the length of every outside side. Use this tag when the stated perimeter matches the total.

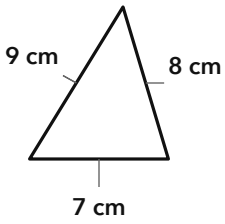
Claim: 20 cm



INCORRECT PERIMETER

Add the length of every outside side. Use this tag when the stated perimeter does not match the total.

Claim: 23 cm



1 SORT

8 items

Circle the tag for each figure, then under Part 2, choose two figures and show the addition you used to decide.

1.

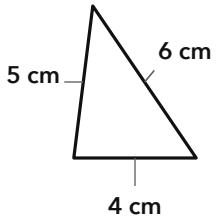


Figure 1. Claim: 15 cm

CORRECT **INCORRECT**

2.

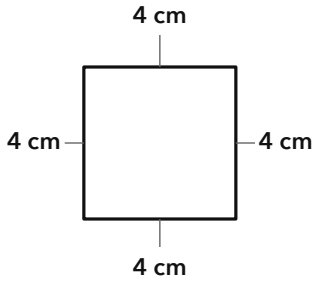


Figure 2. Claim: 12 cm

CORRECT **INCORRECT**

3.

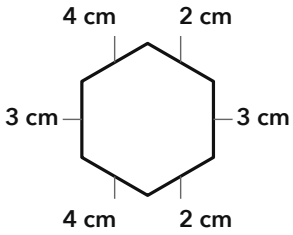


Figure 3. Claim: 17 cm

CORRECT **INCORRECT**

4.

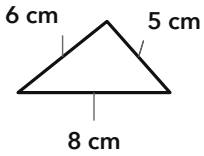


Figure 4. Claim: 19 cm

CORRECT **INCORRECT**

5.

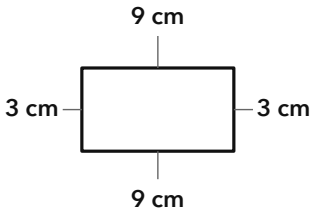


Figure 5. Claim: 24 cm

CORRECT **INCORRECT**

6.

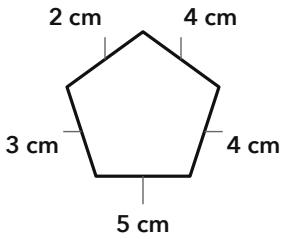


Figure 6. Claim: 19 cm

CORRECT **INCORRECT**

7.

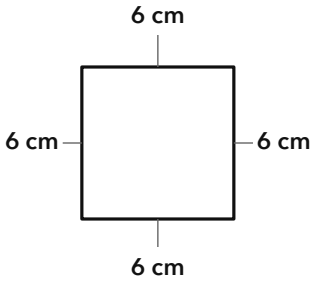


Figure 7. Claim: 30 cm

CORRECT **INCORRECT**

8.

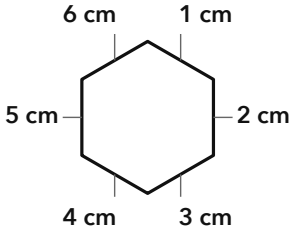


Figure 8. Claim: 21 cm

CORRECT **INCORRECT**

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new perimeter claim for each tag. Include the side lengths and an addition equation.

CORRECT

INCORRECT

CHALLENGE

A flower bed has six sides measuring 4 m, 7 m, 5 m, 6 m, 3 m, and 6 m. What is its perimeter? Write an addition equation and a sentence that justifies your answer.

ANSWER KEY

Perimeter Claim Check

GRADE 3 · 3.MG.2.b.iii

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1. Claim: 15 cm (triangle)	**CORRECT**	4 + 6 + 5 = 15 cm.
2	Figure 2. Claim: 12 cm (square)	**INCORRECT**	4 + 4 + 4 + 4 = 16 cm, not 12 cm.
3	Figure 3. Claim: 17 cm (hexagon)	**INCORRECT**	2 + 3 + 2 + 4 + 3 + 4 = 18 cm, not 17 cm.
4	Figure 4. Claim: 19 cm (triangle)	**CORRECT**	8 + 5 + 6 = 19 cm.
5	Figure 5. Claim: 24 cm (rectangle)	**CORRECT**	9 + 3 + 9 + 3 = 24 cm.
6	Figure 6. Claim: 19 cm (pentagon)	**INCORRECT**	4 + 4 + 5 + 3 + 2 = 18 cm, not 19 cm.
7	Figure 7. Claim: 30 cm (square)	**INCORRECT**	6 + 6 + 6 + 6 = 24 cm, not 30 cm.
8	Figure 8. Claim: 21 cm (hexagon)	**CORRECT**	1 + 2 + 3 + 4 + 5 + 6 = 21 cm.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **CORRECT**: A triangle has sides 3 cm, 4 cm, and 5 cm. 3 + 4 + 5 = 12 cm, so the claim is 12 cm.
- **INCORRECT**: A quadrilateral has sides 2 cm, 3 cm, 4 cm, and 5 cm. 2 + 3 + 4 + 5 = 14 cm, so a claim of 13 cm is incorrect.

Challenge: The perimeter is 31 m. 4 m + 7 m + 5 m + 6 m + 3 m + 6 m = 31 m, so I added all six outside sides.

Correct: 1, 4, 5, and 8. Incorrect: 2, 3, 6, and 7. For Part 2, accept explanations that add every labeled side and compare the total with the claim.