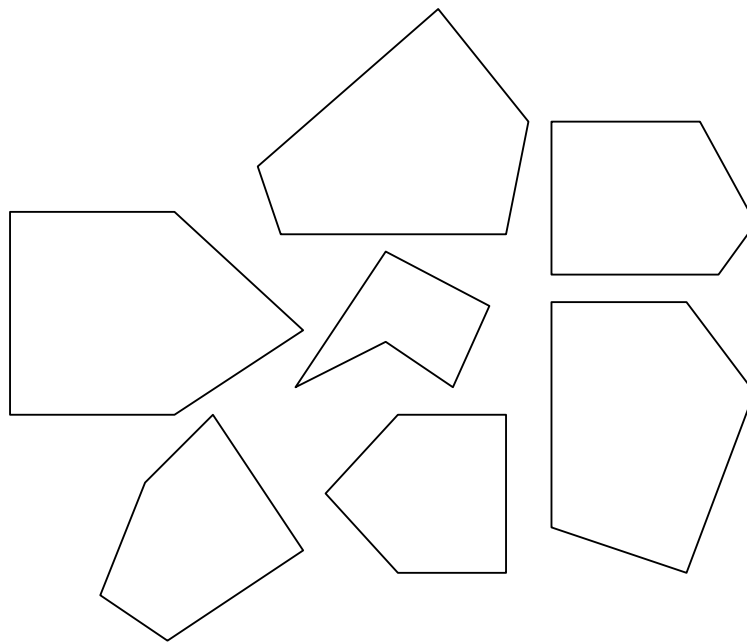


MATH

FINDING THE PERIMETER OF A PENTAGON



Australian Government

AusAID



To the Learner

Kid, let's have more fun in finding the perimeter of another polygon which is the pentagon.



Let's Learn This

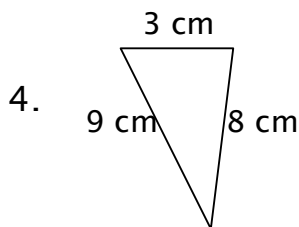
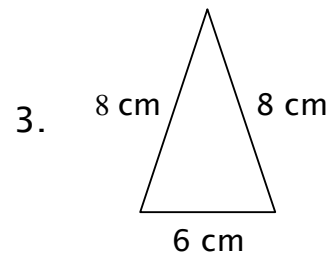
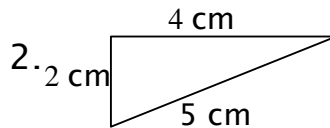
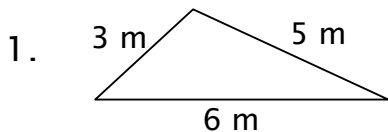
Finding the perimeter of a pentagon.



Let's Try This

Find the perimeter of each triangle: The formula is provided for you.

Formula : $P = S_1 + S_2 + S_3$

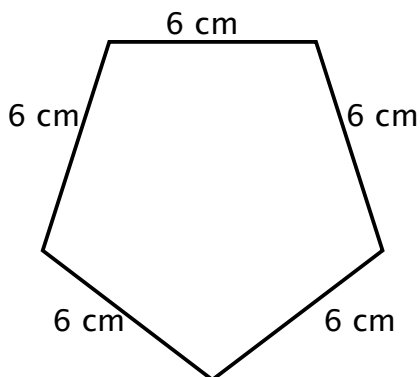


5. $S_1 = 12 \text{ cm}$
 $S_2 = 13 \text{ cm}$
 $S_3 = 10 \text{ cm}$



Let's Study This

Look closely.



The figure above is a regular pentagon. It has five equal sides.
What is its perimeter?

To find the perimeter of the given figure, add all the lengths of the five sides.

You can also multiply the length of one side, 6cm by 5 since the lengths of the sides are equal.

So,

$$P = S_1 + S_2 + S_3 + S_4 + S_5 \text{ or } P = 5 \times S$$

$$P = 6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} \text{ or } P = 5 \times 6 \text{ cm}$$

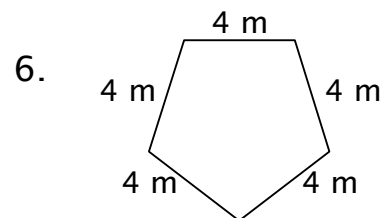
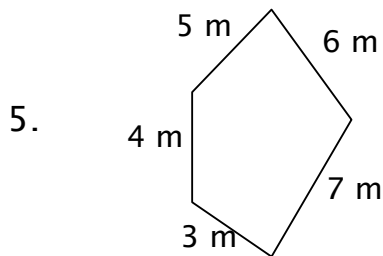
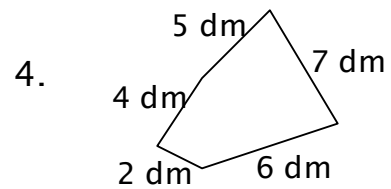
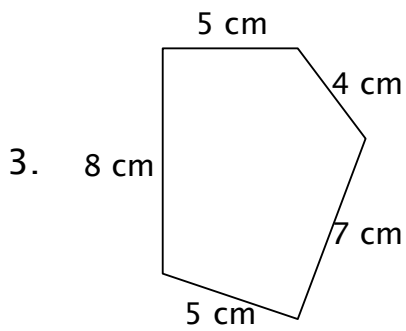
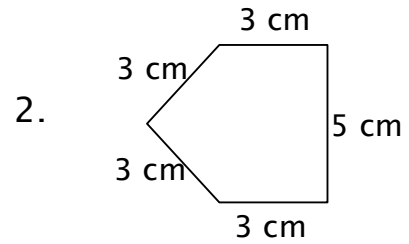
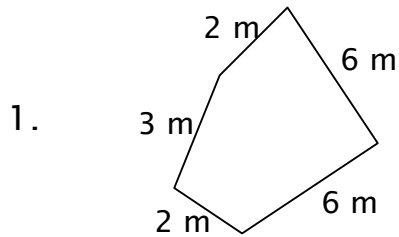
$$P = 30 \text{ cm}$$

$$P = 30 \text{ cm}$$



Let's Do This

Find the perimeter of each pentagon.





Let's Remember This

To find the perimeter of a pentagon, add the measures of the sides.

You can also multiply the measure of one side by 5 if all sides are of equal lengths.

$$P = S_1 + S_2 + S_3 + S_4 + S_5 \text{ or } P = 5 \times S$$

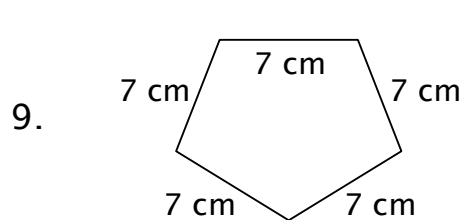
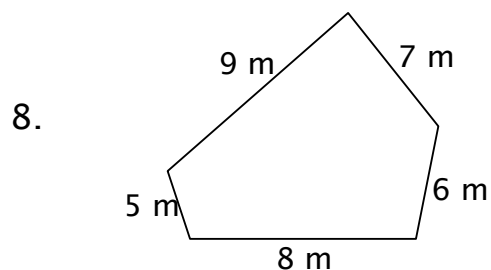
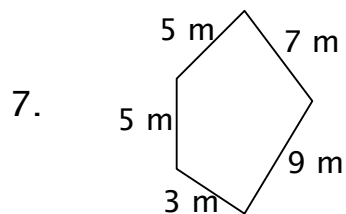
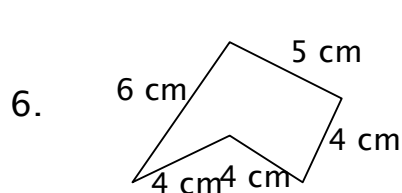


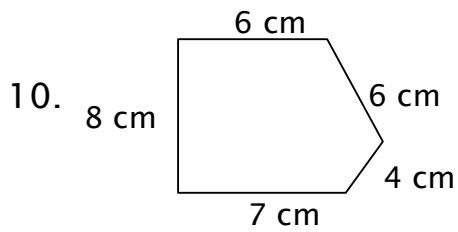
Let's Do More

a. Find the perimeter of a pentagon with these measurements.

- 46 m, 35 m, 41 m, 38 m, 40 m
- 10 m, 15 m, 16 m, 18 m, 19 m
- 7 cm, 9 cm, 12 cm, 10 cm, 8 cm
- Each side of a pentagon measures 9 m.
- When one side of a pentagon is 2cm.

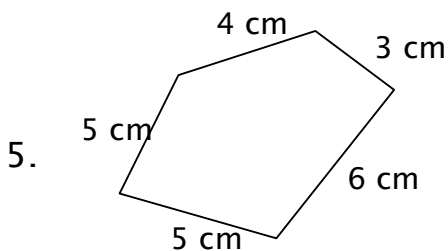
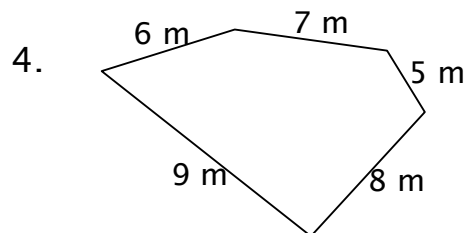
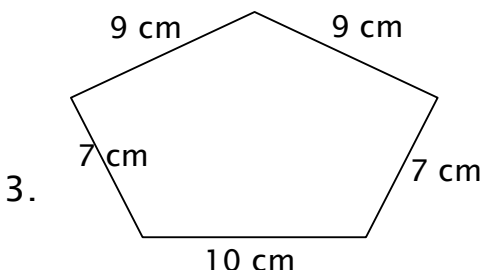
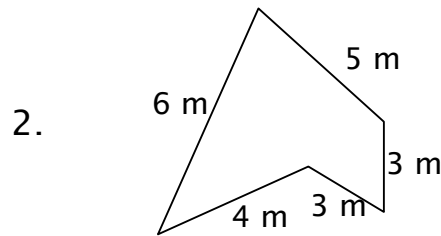
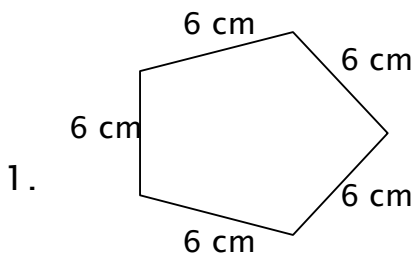
b. Solve the perimeter of each figure.





Let's Test Ourselves

Find the perimeter



Check your answers with the answer key

If you get 3 - 5, you may proceed to the next module.

If you get below 3, you need to review the process in finding the perimeter of a pentagon.



Answer Key

Let's Try This

- | | | |
|----------|----------|----------|
| 1. 14 m | 3. 22 cm | 5. 35 cm |
| 2. 11 cm | 4. 20 cm | |

Let's Do This

- | | |
|----------|----------|
| 1. 19 cm | 4. 24 dm |
| 2. 17 cm | 5. 25 m |
| 3. 29 m | 6. 20 cm |

Let's Do more

- | | | | |
|----|----------|----------|-----------|
| a. | 1. 200 m | 3. 46 cm | 5. 10 cm |
| | 2. 78 m | 4. 45 m | |
| b. | 6. 23 cm | 8. 35 m | 10. 31 cm |
| | 7. 29 m | 9. 45 m | |

Let's Test Ourselves

1. 30 cm
2. 21 m
3. 42 cm
4. 35 m
5. 23 cm