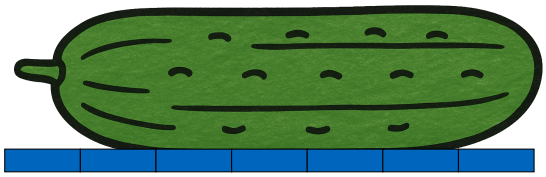
LENGTHS

A MEASURING LENGTHS

A.1 MEASURING LENGTHS WITH BLOCKS

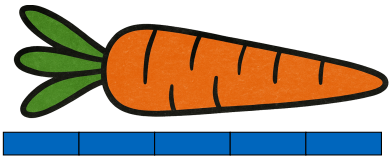
Ex 1: How long?



7 blocks long

Answer: The cucumber measures 7 blocks long.

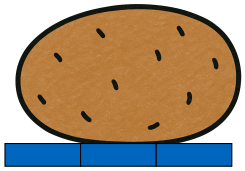
Ex 2: How long?



5 blocks long

Answer: The carrot measures 5 blocks long.

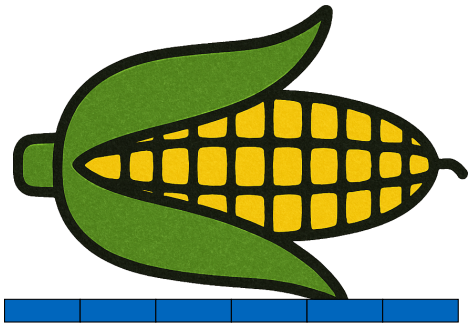
Ex 3: How long?



3 blocks long

Answer: The potato measures 3 blocks long.

Ex 4: How long?

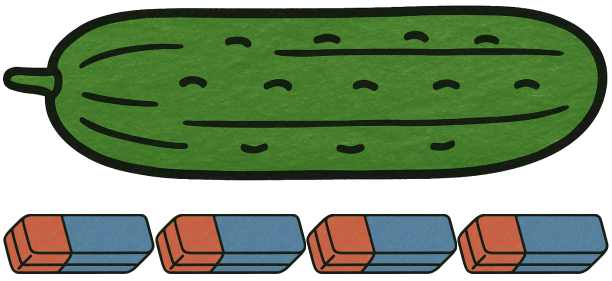


6 blocks long

Answer: The corn measures 6 blocks long.

A.2 MEASURING LENGTHS WITH ERASERS

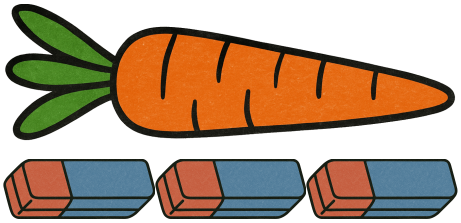
Ex 5: How long?



4 erasers long

Answer: The cucumber measures 4 erasers long.

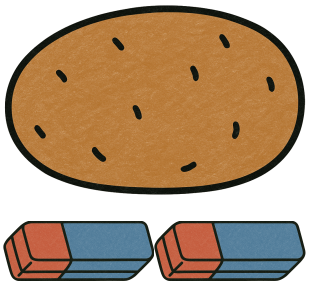
Ex 6: How long?



3 erasers long

Answer: The carrot measures 3 erasers long.

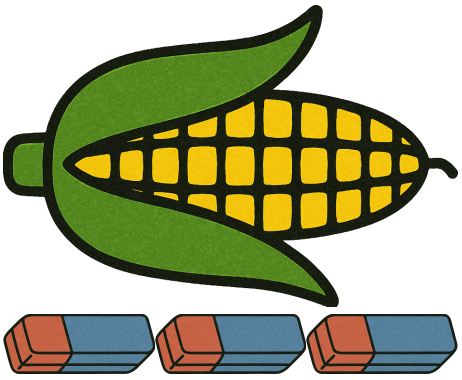
Ex 7: How long?



2 erasers long

Answer: The potato measures 2 erasers long.

Ex 8: How long?



3 erasers long

Answer: The corn measures 3 erasers long.

B LENGTH UNITS

B.1 CHOOSING THE UNIT OF LENGTH

MCQ 9: Which unit will be used to measure how tall a house is?

Choose 1 answer:

- ☐ Centimeters
- ☒ Meters

Answer: Meters will be used to measure how tall a house is.

MCQ 10: Which unit will be used to measure how long a pencil is?

Choose 1 answer:

☐ Centimeters

☒ Meters

Answer: Centimeters will be used to measure how long a pencil is.

MCQ 11: Which unit will be used to measure how tall a tree is?

Choose 1 answer:

☐ Centimeters

☒ Meters

Answer: Meters will be used to measure how tall a tree is.

MCQ 12: Which unit will be used to measure how long a book is?

Choose 1 answer:

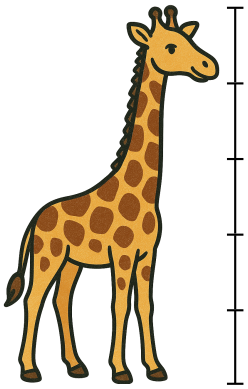
☐ Centimeters

☒ Meters

Answer: Centimeters will be used to measure how long a book is.

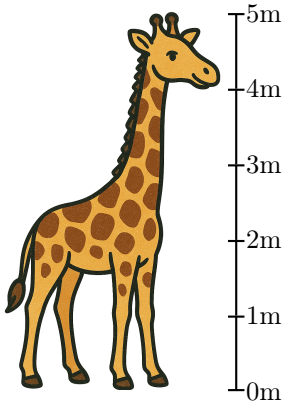
B.2 MEASURING

Ex 13:

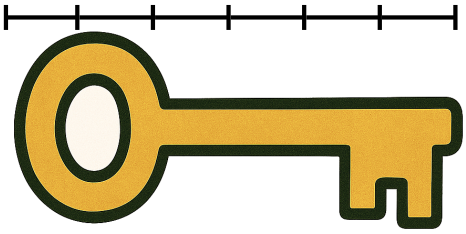


The giraffe measures 5 **meters** tall.

Answer: The giraffe measures 5 meters tall.

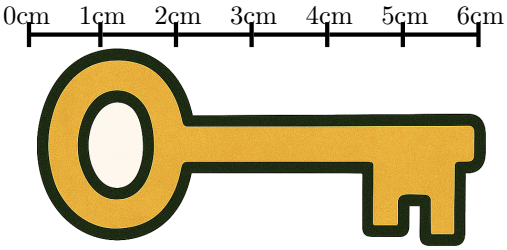


Ex 14:

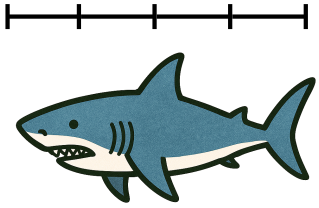


The key measures 6 **centimeters** long.

Answer: The key measures 6 centimeters long.

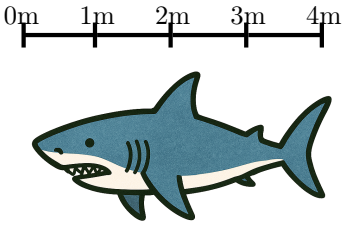


Ex 15:

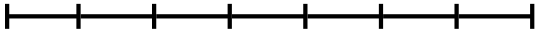


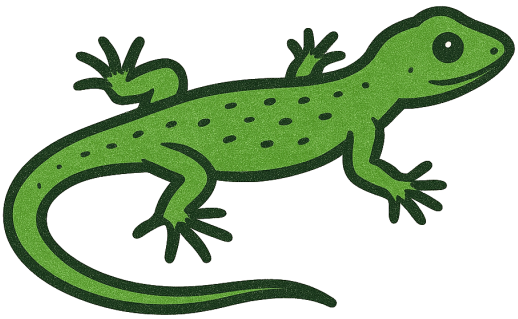
The shark measures 4 **meters** long.

Answer: The shark measures 4 meters long.



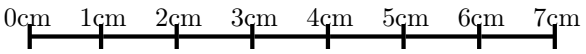
Ex 16:

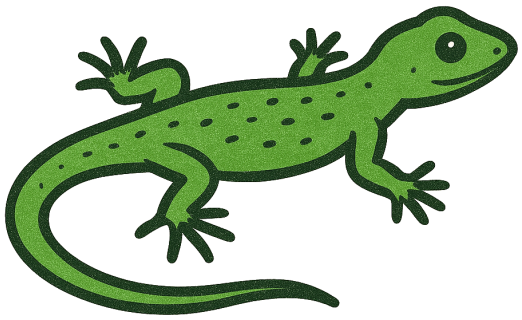




The lizard measures 7 **centimeters** long.

Answer: The lizard measures 7 centimeters long.

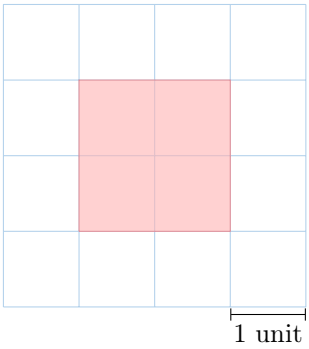




C PERIMETER

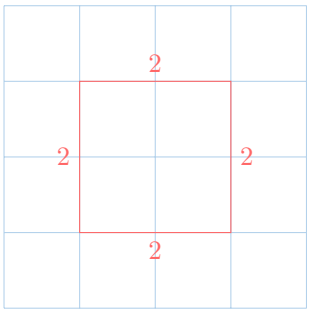
C.1 FINDING PERIMETER OF A SHAPE

Ex 17: What is the perimeter of the shaded figure?



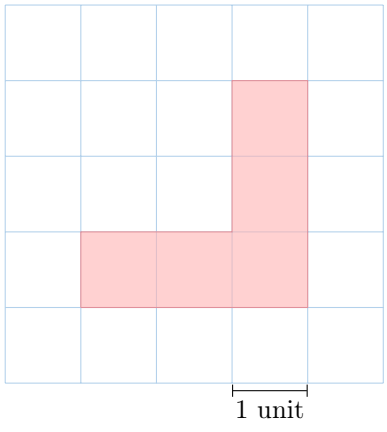
$\boxed{8}$ units

Answer:



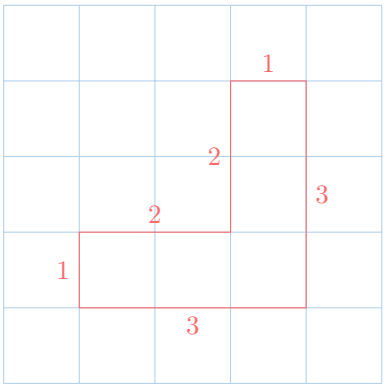
To find the perimeter, we add the length of all 4 sides : $2 + 2 + 2 + 2$.
The perimeter is 8 units.

Ex 18: What is the perimeter of the shaded figure?



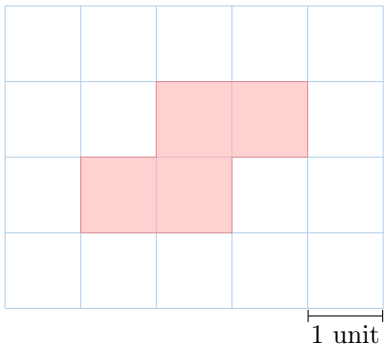
$\boxed{12}$ units

Answer:



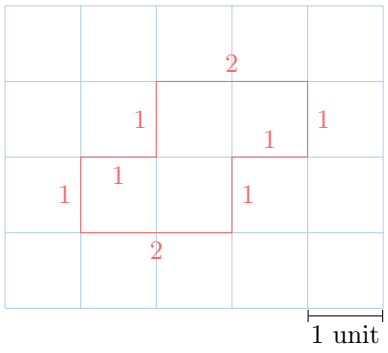
To find the perimeter, we add the length of all sides: $3 + 3 + 1 + 2 + 2 + 1$.
The perimeter is 12 units.

Ex 19: What is the perimeter of the shaded figure?



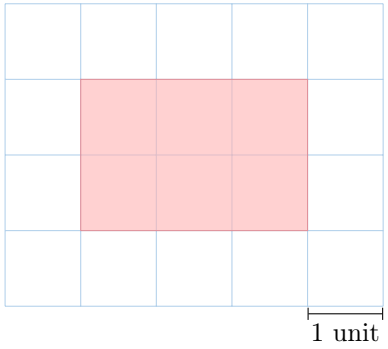
$\boxed{10}$ units

Answer:



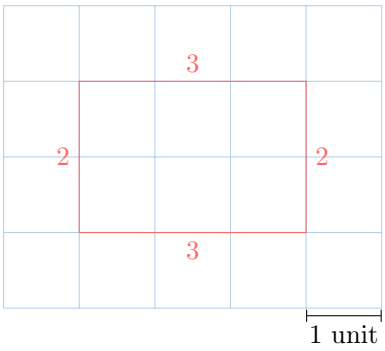
To find the perimeter, we add the length of all sides: $2 + 1 + 1 + 1 + 2 + 1 + 1 + 1$.
The perimeter is 10 units.

Ex 20: What is the perimeter of the shaded figure?



$\boxed{10}$ units

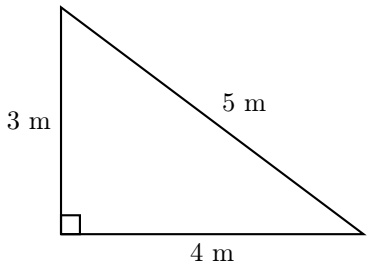
Answer:



To find the perimeter, we add the length of all sides: 3 + 2 + 3 + 2.
The perimeter is 10 units.

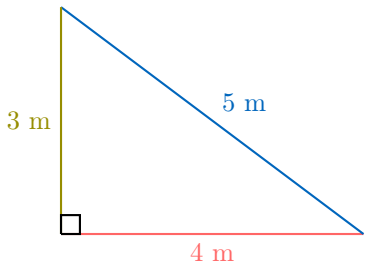
C.2 FINDING PERIMETER WHEN GIVEN SIDE LENGTHS

Ex 21: What is the perimeter of the right angle triangle?



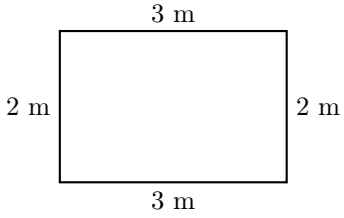
$\boxed{12}$ meters

Answer: We find the perimeter by adding all of the side lengths.



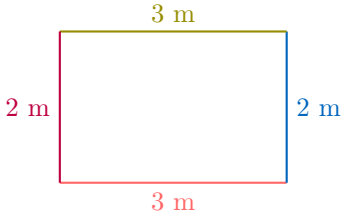
$$\text{Perimeter} = 4\text{ m} + 5\text{ m} + 3\text{ m}$$
$$= 12\text{ m}$$

Ex 22: What is the perimeter of the rectangle?



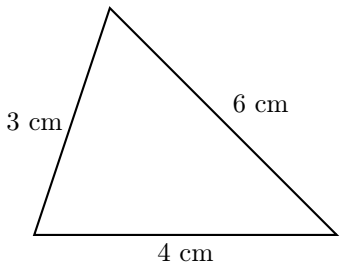
$\boxed{10}$ meters

Answer: We find the perimeter by adding all of the side lengths.



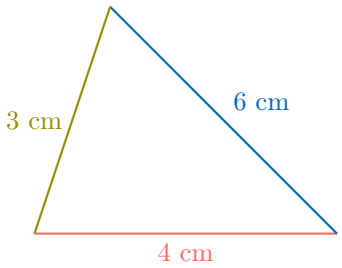
$$\text{Perimeter} = 3\text{ m} + 2\text{ m} + 3\text{ m} + 2\text{ m}$$
$$= 10\text{ m}$$

Ex 23: What is the perimeter of the scalene ?



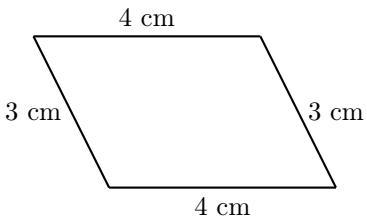
$\boxed{13}$ centimeters

Answer: We find the perimeter by adding all of the side lengths.



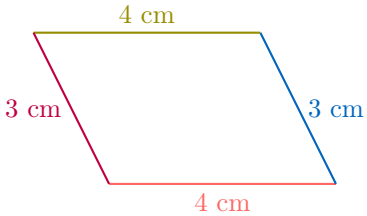
$$\text{Perimeter} = 4\text{ cm} + 6\text{ cm} + 3\text{ cm}$$
$$= 13\text{ cm}$$

Ex 24: What is the perimeter of the parallelogram?



$\boxed{14}$ centimeters

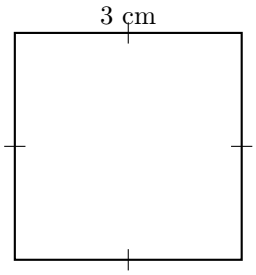
Answer: We find the perimeter by adding all of the side lengths.



$$\text{Perimeter} = 4\text{ cm} + 3\text{ cm} + 4\text{ cm} + 3\text{ cm}$$
$$= 14\text{ cm}$$

C.3 BUILDING EXPRESSIONS

MCQ 25: Which of the following expressions can be used to find the perimeter of the square?
All sides are the same length.



Choose 2 answers:

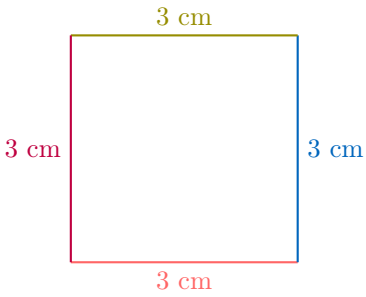
☒ 4×3

☐ $4 + 3$

☒ $3 + 3 + 3 + 3$

☐ $3 + 3$

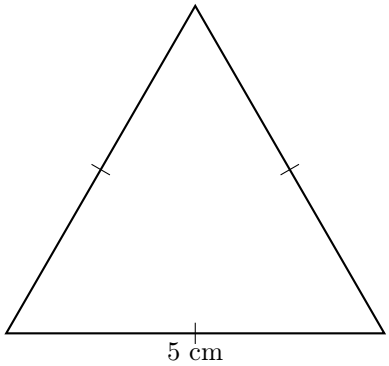
Answer: In the square, all sides are the same length.



$$\begin{aligned}\text{Perimeter} &= 3 + 3 + 3 + 3 \\ &= 4 \times 3\end{aligned}$$

So, the correct expressions are 4×3 and $3+3+3+3$, both equal to 12 cm.

MCQ 26: Which of the following expressions can be used to find the perimeter of the equilateral triangle?
All sides are the same length.



Choose 2 answers:

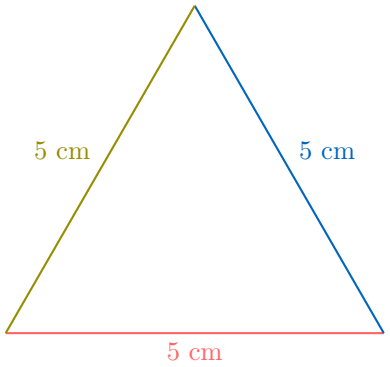
☐ $5 + 3$

☒ 3×5

☒ $5 + 5 + 5$

☐ $5 + 5$

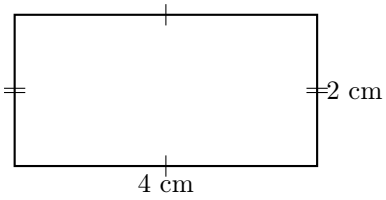
Answer: In the equilateral triangle, all sides are the same length.



$$\begin{aligned}\text{Perimeter} &= 5 + 5 + 5 \\ &= 3 \times 5\end{aligned}$$

So, the correct expressions are 3×5 and $5 + 5 + 5$, both equal to 15 cm.

MCQ 27: Which of the following expressions can be used to find the perimeter of the rectangle?
Opposite sides are the same length.



Choose 2 answers:

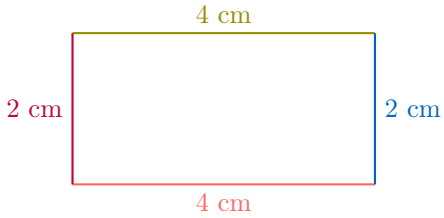
☐ $2 + 4$

☒ $(2 \times 2) + (2 \times 4)$

☒ $4 + 4 + 2 + 2$

☐ 4×2

Answer: In the rectangle, opposite sides are the same length.



$$\begin{aligned}\text{Perimeter} &= 4 + 4 + 2 + 2 \\ &= (2 \times 4) + (2 \times 2)\end{aligned}$$

So, the correct expressions are $(2 \times 2) + (2 \times 4)$ and $4+4+2+2$, both equal to 12 cm.