PERIMETER

A LENGTH UNITS

A.1 CHOOSING LENGTH UNITS

MCQ 1: Which unit will be used to measure how long a pencil is?
Choose 1 answer:

- ☐ Centimeters
- ☐ Meters
- ☐ Kilometers

MCQ 2: Which unit will be used to measure the distance between two cities?
Choose 1 answer:

- ☐ Millimeters
- ☐ Centimeters
- ☐ Meters
- ☐ Kilometers

MCQ 3: Which unit will be used to measure how tall a tree is?
Choose 1 answer:

- ☐ Millimeters
- ☐ Centimeters
- ☐ Meters
- ☐ Kilometers

MCQ 4: Which unit will be used to measure the length of an ant?
Choose 1 answer:

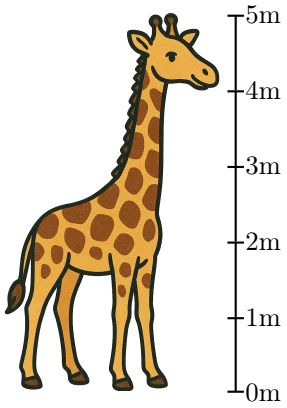
- ☐ Millimeters
- ☐ Centimeters
- ☐ Meters
- ☐ Kilometers

MCQ 5: Which unit will be used to measure how long a book is?
Choose 1 answer:

- ☐ Millimeters
- ☐ Centimeters
- ☐ Meters
- ☐ Kilometers

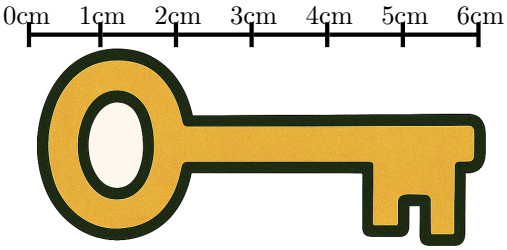
A.2 MEASURING

Ex 6:



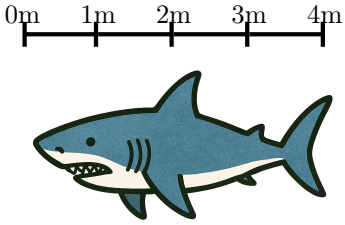
The giraffe measures ☐ ☐ centimeters ☐ meters tall.

Ex 7:



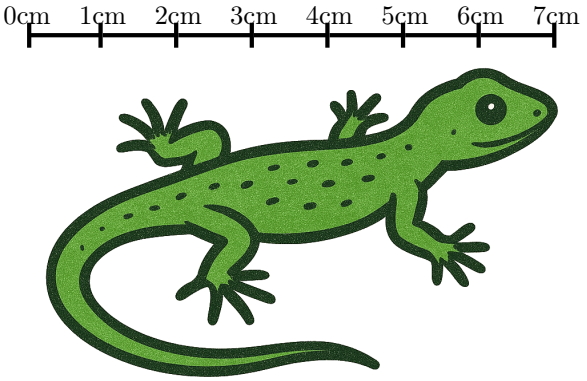
The key measures ☐ ☐ centimeters ☐ meters long.

Ex 8:



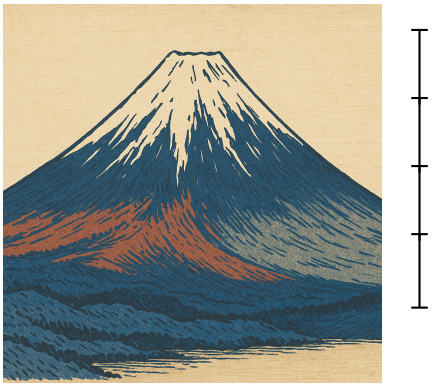
The shark measures ☐ ☐ centimeters ☐ meters long.

Ex 9:



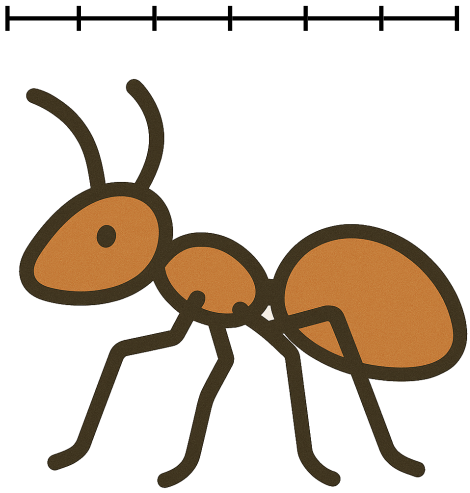
The lizard measures ☐ ☐ centimeters ☐ meters long.

Ex 10:



Mount Fuji measures ☐ ☐ meters ☐ kilometers tall.

Ex 11:



The ant measures ☐ ☐ millimeters ☐ centimeters long.

B CONVERSION OF LENGTH UNITS

B.1 CONVERTING UNITS OF LENGTH

Ex 12: Convert:

$2\,\text{km} =$ ☐ m.

Ex 13: Convert:

$4\,\text{m} =$ ☐ cm.

Ex 14: Convert:

$300\,\text{cm} =$ ☐ m.

Ex 15: Convert:

$4\,000\,\text{m} =$ ☐ km.

Ex 16: Convert:

$23\,\text{cm} =$ ☐ mm.

Ex 17: Convert:

$6\,000\,\text{mm} =$ ☐ m.

B.2 CONVERTING UNITS OF LENGTH WITH DECIMAL NUMBERS

Ex 18: Convert:

$2.3\,\text{km} =$ ☐ m.

Ex 19: Convert:

$1.60\,\text{m} =$ ☐ cm.

Ex 20: Convert:

$22.5\,\text{cm} =$ ☐ mm.

Ex 21: Convert:

$185\,\text{cm} =$ ☐ m.

Ex 22: Convert:

$2\,300\,\text{m} =$ ☐ km.

Ex 23: Convert:

$42.2\,\text{km} =$ ☐ m.

B.3 SOLVING PROBLEMS WITH UNIT CONVERSIONS

MCQ 24: Hugo and Louis go walking. Louis walks 5 000 meters, and Hugo walks 4.2 kilometers. Who did the longest walk?

☐ Louis

☐ Hugo

MCQ 25: A giraffe is 5.1 meters tall, and a horse is 200 centimeters tall. Which animal is taller?

☐ Giraffe

☐ Horse

MCQ 26: A snake is 3.8 meters long, and a crocodile is 400 centimeters long. Which animal is longer?

☐ Snake

☐ Crocodile

MCQ 27: Emma walks 2.7 km to school, and Liam walks 3 000 meters to school. Who walks farther?

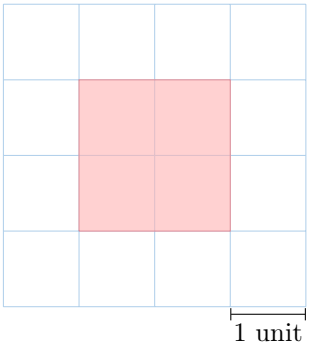
☐ Emma

☐ Liam

C PERIMETER

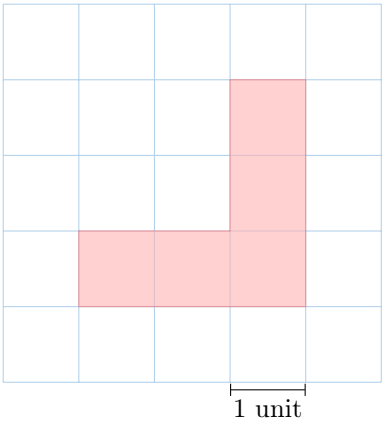
C.1 FINDING PERIMETER OF A SHAPE

Ex 28: What is the perimeter of the shaded figure?



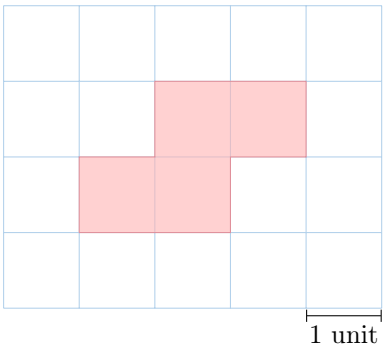
$P =$ ☐ units

Ex 29: What is the perimeter of the shaded figure?



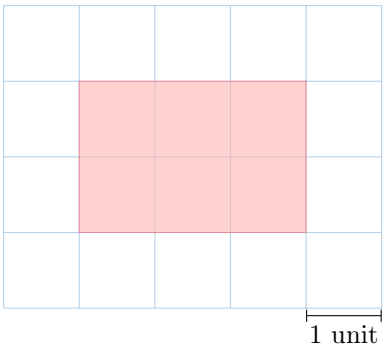
$P =$ ☐ units

Ex 30: What is the perimeter of the shaded figure?



$P =$ ☐ units

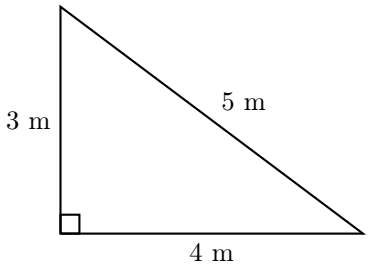
Ex 31: What is the perimeter of the shaded figure?



$P =$ ☐ units

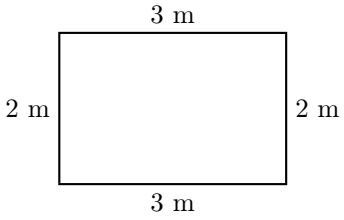
C.2 FINDING PERIMETER WHEN GIVEN SIDE LENGTHS

Ex 32: What is the perimeter of the right angle triangle?



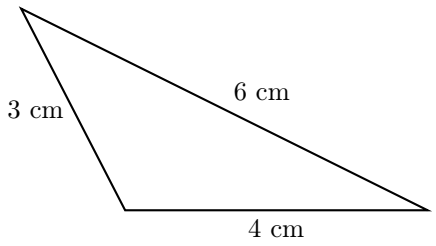
$P =$ ☐ m

Ex 33: What is the perimeter of the rectangle?



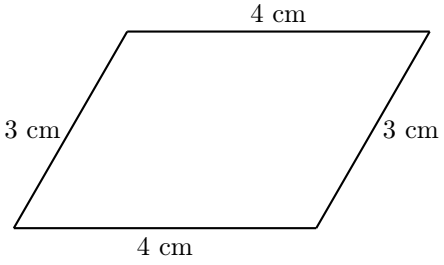
$P =$ ☐ m

Ex 34: What is the perimeter of the triangle?



$P =$ ☐ cm

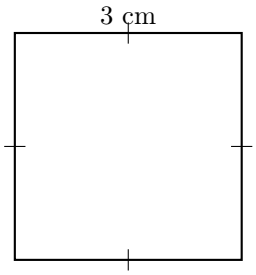
Ex 35: What is the perimeter of the parallelogram?



$P =$ ☐ cm

C.3 BUILDING EXPRESSIONS

MCQ 36: Which of the following expressions can be used to find the perimeter of the square?
All sides are the same length.



Choose 2 answers:

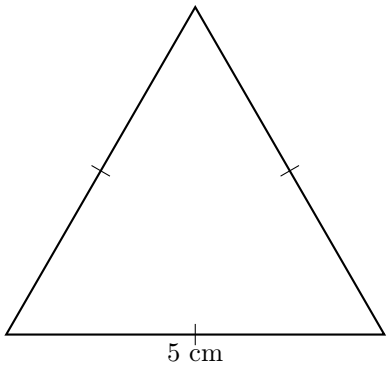
☐ 4×3

☐ $4 + 3$

☐ $3 + 3 + 3 + 3$

☐ $3 + 3$

MCQ 37: 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:

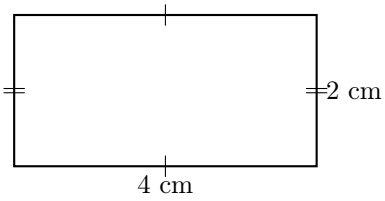
☐ $5 + 3$

☐ 3×5

☐ $5 + 5 + 5$

☐ $5 + 5$

MCQ 38: Which of the following expressions can be used to find the perimeter of the rectangle?
Opposite sides are the same length.



Choose 2 answers:

☐ $2 + 4$

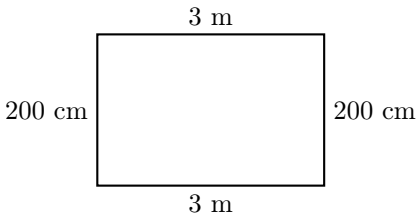
☐ $(2 \times 2) + (2 \times 4)$

☐ $4 + 4 + 2 + 2$

☐ 4×2

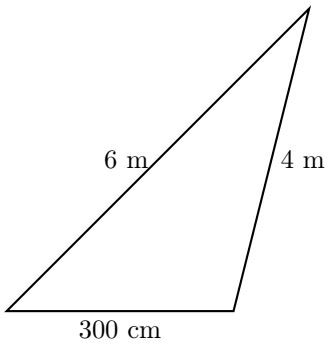
C.4 FINDING PERIMETER WHEN GIVEN SIDE LENGTHS USING CONVERSION UNIT LENGTHS

Ex 39: What is the perimeter of the rectangle?



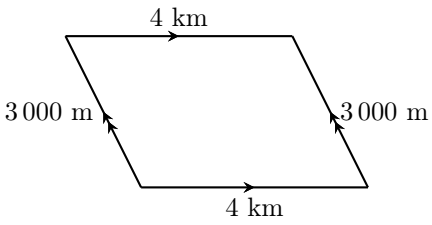
$P =$ ☐ m

Ex 40: What is the perimeter of the triangle?



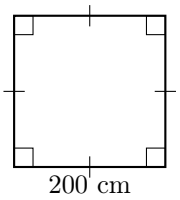
$P =$ ☐ m

Ex 41: What is the perimeter of the parallelogram?



$P =$ ☐ km

Ex 42: What is the perimeter of the square in meters?

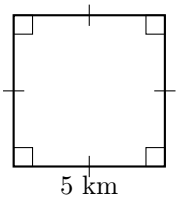


$P =$ ☐ m

D PERIMETER OF COMMON SHAPES

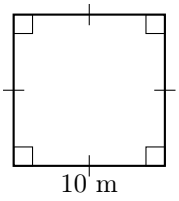
D.1 FINDING PERIMETERS OF SQUARES AND RECTANGLES

Ex 43: What is the perimeter of the square?



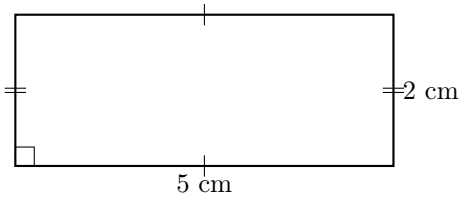
$P =$ ☐ km

Ex 44: What is the perimeter of the square?



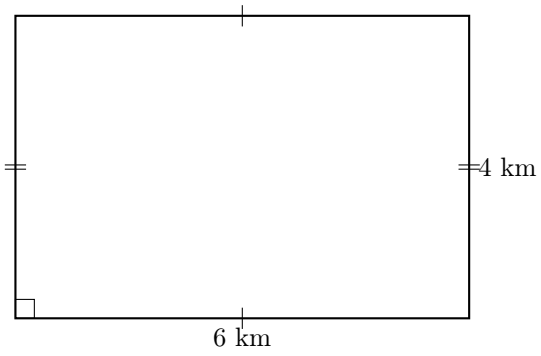
$P =$ ☐ m

Ex 45: What is the perimeter of the rectangle?



$P =$ ☐ cm

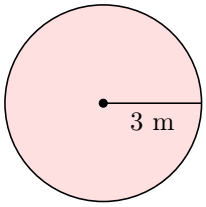
Ex 46: What is the perimeter of the rectangle?



$P =$ ☐ km

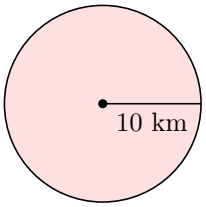
D.2 FINDING CIRCUMFERENCES

Ex 47: What is the circumference of the circle?



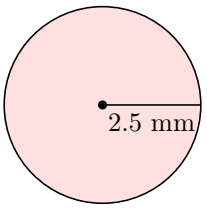
☐ meters (round to 1 decimal place)

Ex 48: What is the circumference of the circle?



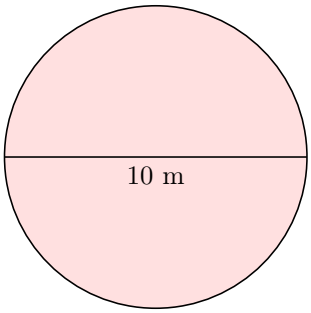
☐ kilometers (round to 1 decimal place)

Ex 49: What is the circumference of the circle?



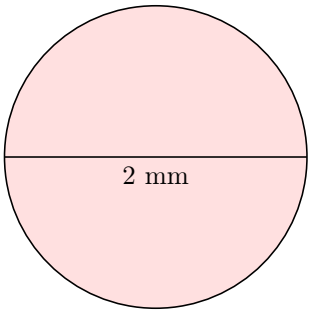
☐ millimeters (round to 1 decimal place)

Ex 50: What is the circumference of the circle with a diameter of 10 meters?



☐ meters (round to 1 decimal place)

Ex 51: What is the circumference of the circle with a diameter of 2 millimeters?



☐ millimeters (round to 1 decimal place)

D.3 SOLVING PROBLEMS

Ex 52: A farmer wants to build a fence around a rectangular field that measures 30 m by 20 m. The cost of the fence is 10 dollars per meter. What is the total cost to build the fence around the field?

☐ dollars

Ex 53: A park manager wants to install a pathway of lights around a square park that has a side length of 50 m. The cost of installing the lights is 15 dollars per meter. What is the total cost to install the lights around the park?

☐ dollars

Ex 54: A school wants to create a border of flowers around a rectangular garden that measures 40 m by 25 m. The cost of planting the flowers is 8 dollars per meter. What is the total cost to create the flower border around the garden?

☐ dollars

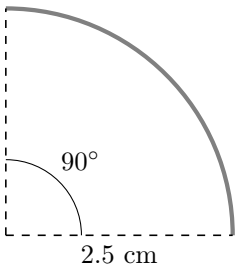
Ex 55: To celebrate a community event, children form a human chain to surround a square park with a side length of 50 m. If 2 children are needed per meter, how many children are required to surround the park?

☐ children

E LENGTH OF AN ARC

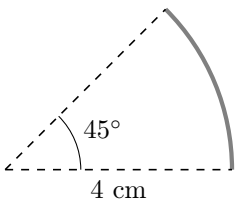
E.1 FINDING THE LENGTH OF ARCS

Ex 56: Find the length of the arc:



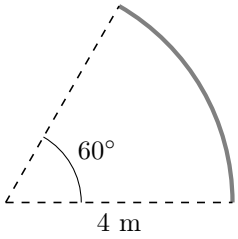
☐ cm (round to 1 decimal place)

Ex 57: Find the length of the arc:



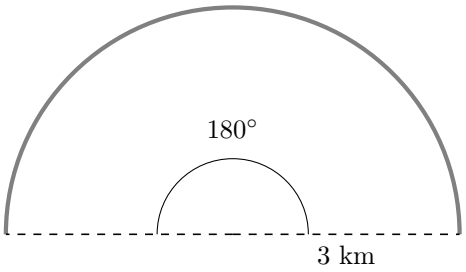
☐ cm (round at 1 decimal place)

Ex 58: Find the length of the arc:



☐ m (round to 1 decimal place)

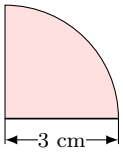
Ex 59: Find the length of the arc:



☐ km (round to 1 decimal place)

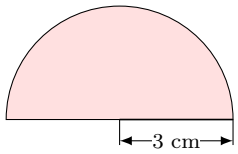
E.2 FINDING PERIMETER OF CIRCULAR SECTORS

Ex 60: Find the perimeter of the quarter circle:



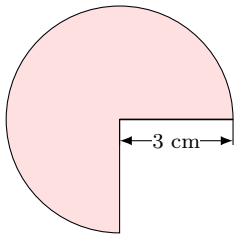
$P =$ ☐ cm (round at 1 decimal place)

Ex 61: Find the perimeter of the half circle:



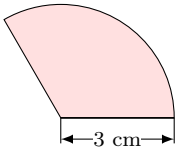
$P =$ ☐ cm (round to 1 decimal place)

Ex 62: Find the perimeter of the three-quarter circle:



$P =$ ☐ cm (round to 1 decimal place)

Ex 63: Find the perimeter of the one-third circle:

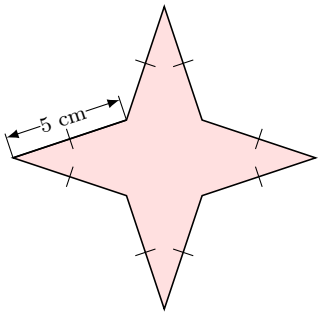


$P =$ ☐ cm (round to 1 decimal place)

F PERIMETER OF COMPOSITE FIGURES

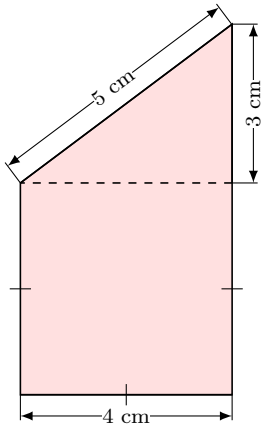
F.1 FINDING THE PERIMETER OF COMPOSITE FIGURES: LEVEL 1

Ex 64: Find the perimeter of the star:



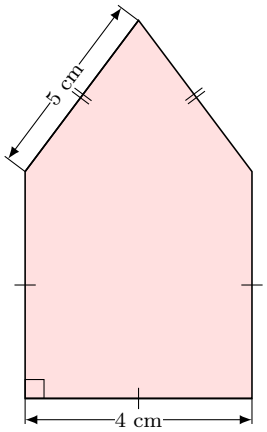
$P =$ ☐ cm

Ex 65: Find the perimeter of the composite figure:



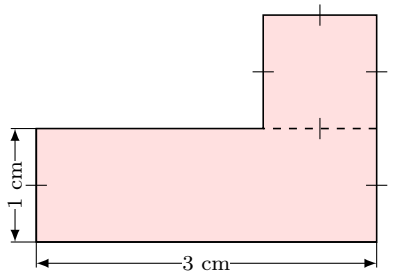
$P =$ ☐ cm

Ex 66: Find the perimeter of the composite figure :



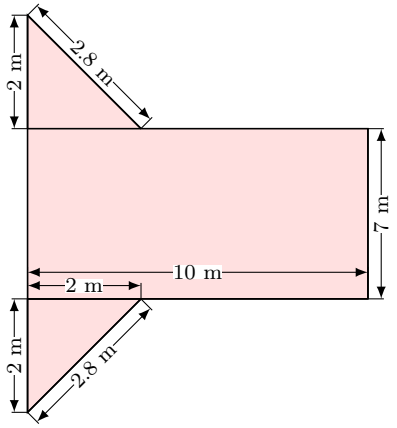
$P =$ ☐ cm

Ex 67: Find the perimeter of the figure:



$P =$ ☐ cm

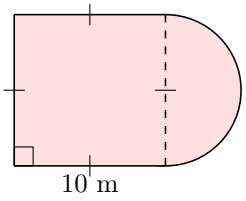
Ex 68: Find the perimeter of the figure



$P =$ ☐ m

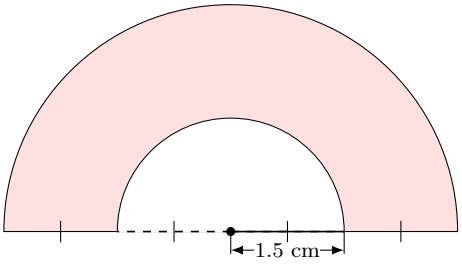
F.2 FINDING THE PERIMETER OF COMPOSITE FIGURES: LEVEL 2

Ex 69: Find the perimeter of the composite figure:



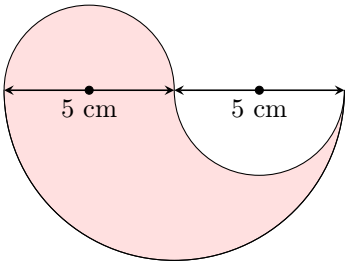
$P =$ ☐ m (round to 1 decimal place)

Ex 70: Find the perimeter of the composite figure:



$P =$ ☐ cm (round to 1 decimal place)

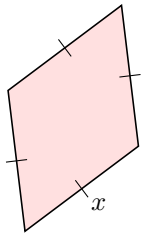
Ex 71: Find the perimeter of the composite figure:



$P =$ ☐ cm (round to 1 decimal place)

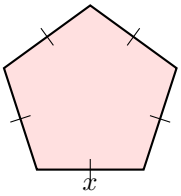
F.3 BUILDING EXPRESSIONS

MCQ 72: Write a formula for the perimeter of the figure:



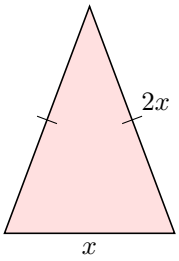
- ☐ $P = 4x$
- ☐ $P = x$
- ☐ $P = 3x$
- ☐ $P = 2$ cm

MCQ 73: Write a formula for the perimeter of the figure:



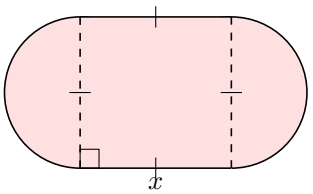
- ☐ $P = 4x$
- ☐ $P = x$
- ☐ $P = 5x$
- ☐ $P = 2$ cm

MCQ 74: Write a formula for the perimeter of the figure:



- ☐ $P = x$
- ☐ $P = 5x$
- ☐ $P = 3x$
- ☐ $P = 2$ cm

MCQ 75: Write a formula for the perimeter of the figure:



- ☐ $P = 3.14$
- ☐ $P = 2\pi x$
- ☐ $P = 2x + 2\pi x$
- ☐ $P = 2x + \pi x$