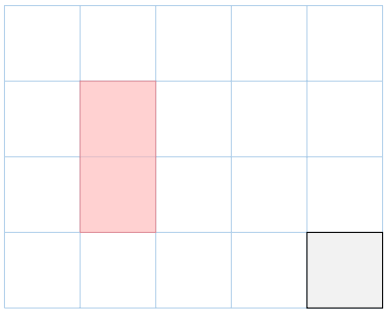
AREA

A DEFINITION

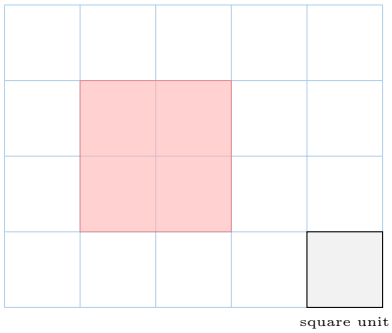
A.1 FINDING AREA OF A SHAPE

Ex 1: What is the area of the red figure?



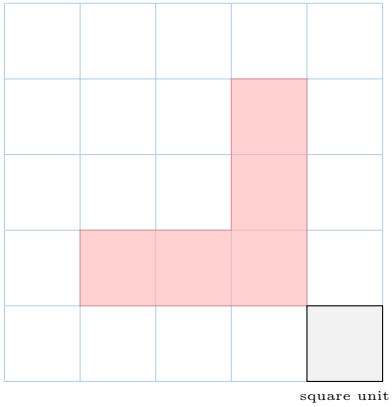
$A =$ ☐ square units

Ex 2: What is the area of the red figure?



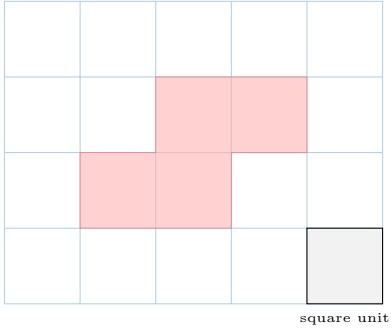
$A =$ ☐ square units

Ex 3: What is the area of the red figure?



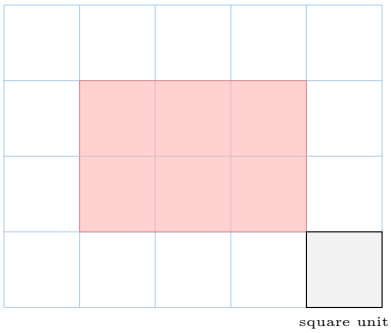
$A =$ ☐ square units

Ex 4: What is the area of the red figure?



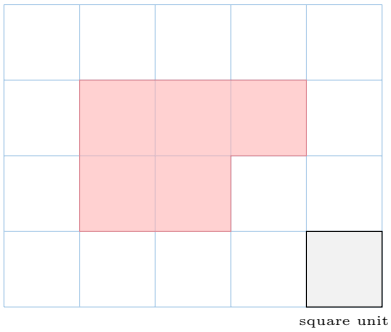
$A =$ ☐ square units

Ex 5: What is the area of the red figure?



$A =$ ☐ square units

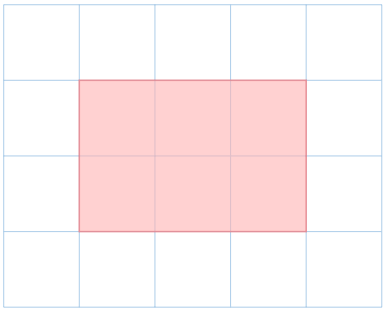
Ex 6: What is the area of the red figure?



$A =$ ☐ square units

A.2 BUILDING FORMULAS

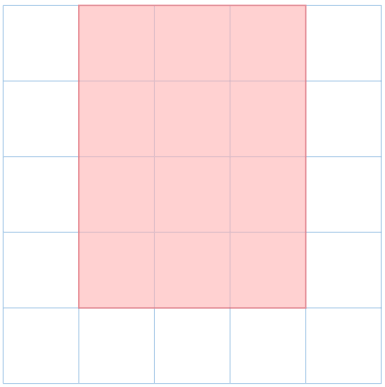
MCQ 7: What is the area of the red rectangle?



Choose the 4 correct answers:

- ☐ $2+2+2$
- ☐ $3+3$
- ☐ $3+2+3+2$
- ☐ 2×3
- ☐ 3×2

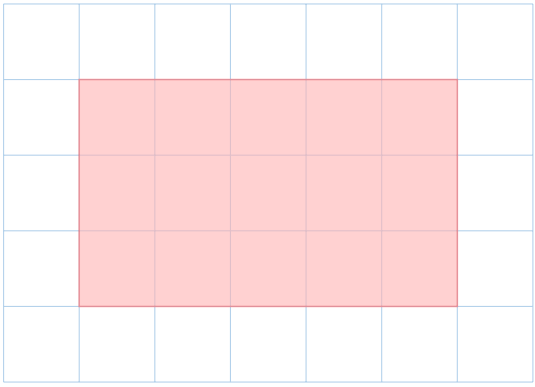
MCQ 8: What is the area of the red rectangle?



Choose 4 correct answers:

- ☐ $3+4+3+4$
- ☐ $4+4+4$
- ☐ $3+3+3+3$
- ☐ 4×3
- ☐ 3×4

MCQ 9: What is the area of the red rectangle?



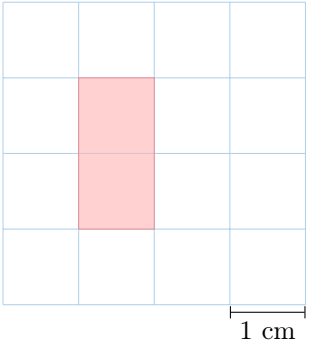
Choose the 4 correct answers:

- ☐ $3+3+3+3+3$
- ☐ $5+5+5$
- ☐ $5+3+5+3$
- ☐ 3×5
- ☐ 5×3

B UNITS OF AREA

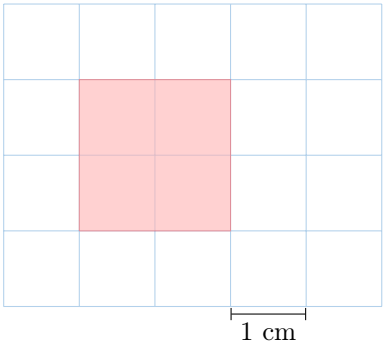
B.1 FINDING AREA OF A SHAPE

Ex 10: What is the area of the red figure?



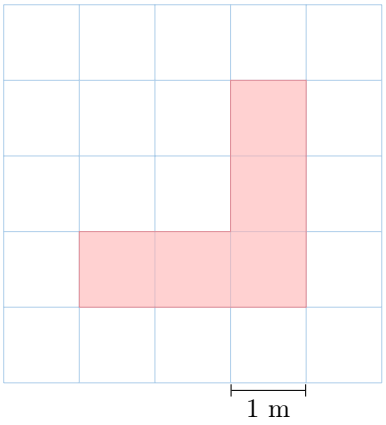
☐ cm^2
☐ m^2

Ex 11: What is the area of the red figure?



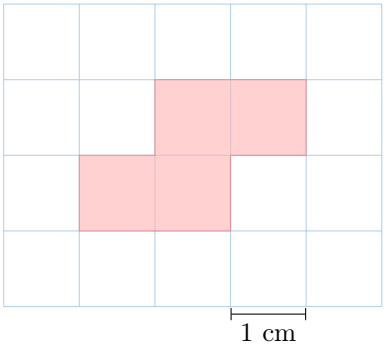
☐ cm^2
☐ m^2

Ex 12: What is the area of the red figure?



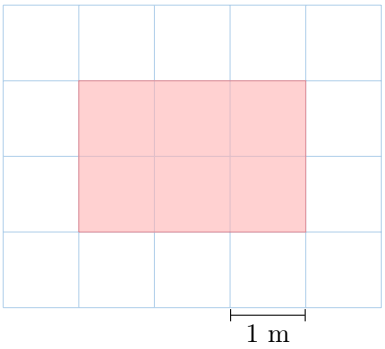
☐ cm^2
☐ m^2

Ex 13: What is the area of the red figure?



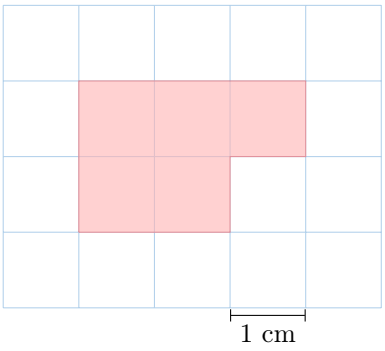
☐ cm^2
☐ m^2

Ex 14: What is the area of the red figure?



☐ cm^2
☐ m^2

Ex 15: What is the area of the red figure?



☐ cm^2
☐ m^2

B.2 CHOOSING UNITS FOR AREA

MCQ 16: What unit will be used to measure the area of your bedroom?
Choose 1 answer:

☐ Square millimeters
☐ Square centimeters
☐ Square meters
☐ Square kilometers

MCQ 17: What unit will be used to measure the area of a piece of paper?
Choose 1 answer:

☐ Square millimeters
☐ Square centimeters
☐ Square meters
☐ Square kilometers

MCQ 18: What unit will be used to measure the area of a country?
Choose 1 answer:

☐ Square millimeters
☐ Square centimeters
☐ Square meters
☐ Square kilometers

MCQ 19: What unit will be used to measure the area of a playground?
Choose 1 answer:

☐ Square millimeters
☐ Square centimeters
☐ Square meters
☐ Square kilometers

MCQ 20: What unit will be used to measure the area of a tiny sticker like a glitter dot?
Choose 1 answer:

☐ Square millimeters
☐ Square centimeters
☐ Square meters
☐ Square kilometers

C CONVERSION OF AREA UNITS

C.1 CONVERTING AREA UNITS

Ex 21: Convert:

$3\,cm^2 = \square\ mm^2$.

Ex 22: Convert:

$5\,000\,mm^2 = \square\ cm^2$.

Ex 23: Convert:

$6\,m^2 = \square\ cm^2$.

Ex 24: Convert:

$90\,000\,cm^2 = \square\ m^2$.

C.2 CONVERTING AREA UNITS WITH DECIMAL NUMBERS

Ex 25: Convert:

$24.5\,m^2 = \square\ cm^2$.

Ex 26: Convert:

$5\,000\,cm^2 = \square\ m^2$.

Ex 27: Convert:

$0.25\,cm^2 = \square\ mm^2$.

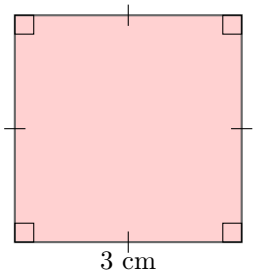
Ex 28: Convert:

$534\,mm^2 = \square\ cm^2$.

D AREA OF A RECTANGLE OR A SQUARE

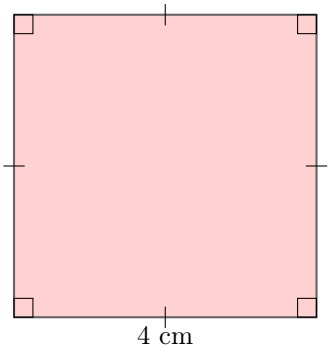
D.1 FINDING AREAS OF SQUARES AND RECTANGLES

Ex 29: What is the area of the red square?



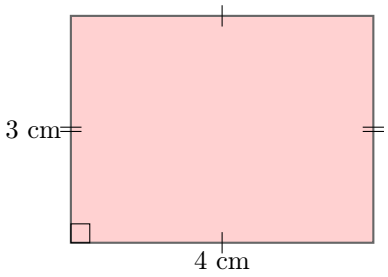
$\square$ cm^2

Ex 30: What is the area of the red square?



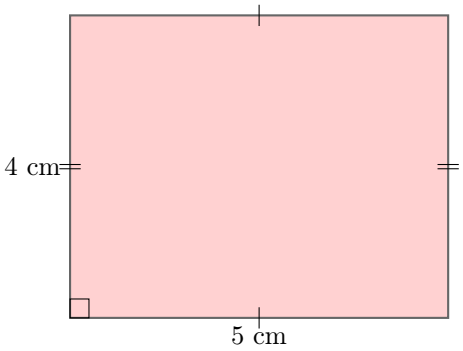
$\square$ cm^2

Ex 31: What is the area of the red rectangle?



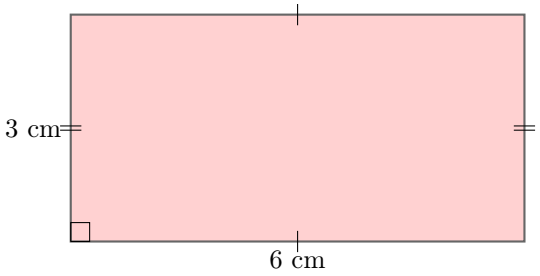
$\square$ cm^2

Ex 32: What is the area of the red rectangle?



$\square$ cm^2

Ex 33: What is the area of the red rectangle?

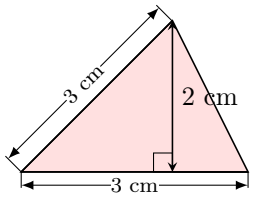


$\square$ cm^2

E AREA OF A TRIANGLE

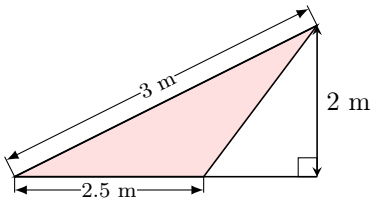
E.1 FINDING AREAS OF TRIANGLES

Ex 34: Find the area of the figure



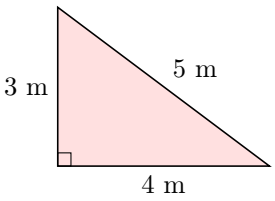
$A =$ $\square$ cm^2

Ex 35: Find the area of the figure



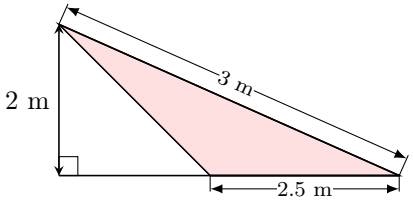
$A =$ $\square$ m^2

Ex 36: Find the area of the figure



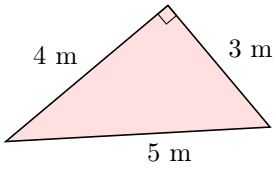
$A =$ $\square$ m^2

Ex 37: Find the area of the figure



$A =$ $\square$ m^2

Ex 38: Find the area of the figure

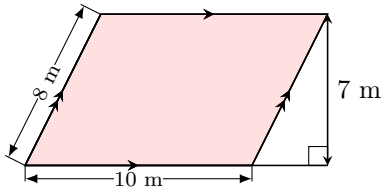


$A =$ ☐ m^2

F AREA OF A PARALLELOGRAM

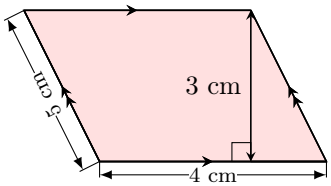
F.1 FINDING AREAS OF PARALLELOGRAMS

Ex 39: Find the area of the figure



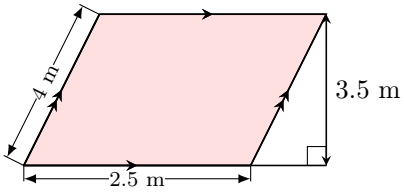
$A =$ ☐ m^2

Ex 40: Find the area of the figure



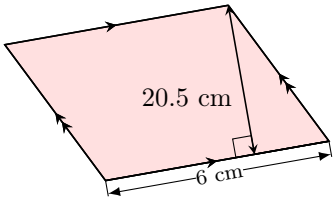
$A =$ ☐ cm^2

Ex 41: Find the area of the figure.



$A =$ ☐ m^2

Ex 42: Find the area of the figure.

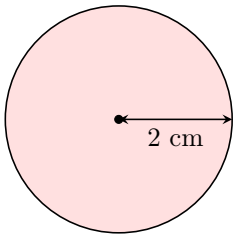


$A =$ ☐ cm^2

G AREA OF A CIRCLE

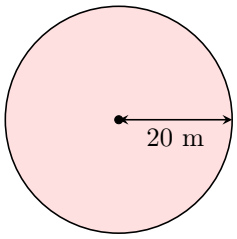
G.1 FINDING AREAS OF CIRCLES

Ex 43: Find the area of the figure (round to 1 decimal place)



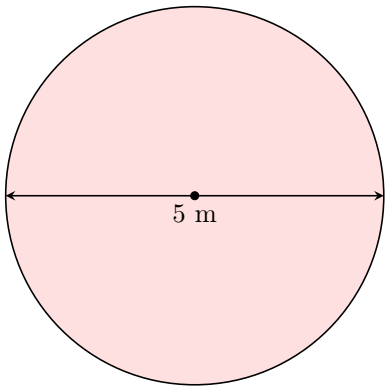
$A \approx$ ☐ cm^2

Ex 44: Find the area of the figure (round to 1 decimal place)



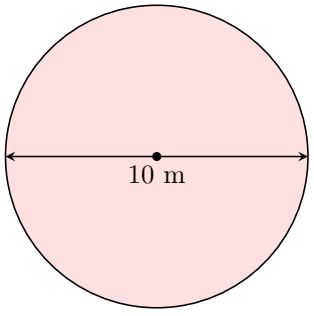
$A \approx$ ☐ m^2

Ex 45: Find the area of the figure (round to 1 decimal place)



$A \approx$ ☐ m^2

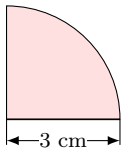
Ex 46: Find the area of the figure (round to 1 decimal place)



$A \approx$ ☐ m^2

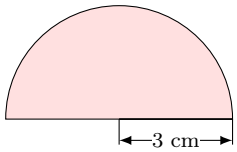
G.2 FINDING AREA OF CIRCULAR SECTORS

Ex 47: Find the area of the quarter circle: (Round to 1 decimal place)



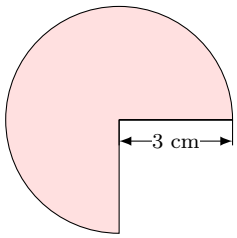
$A =$ ☐ cm^2

Ex 48: Find the area of the half circle: (Round to 1 decimal place)



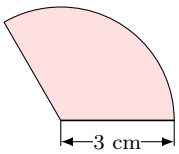
$A =$ ☐ cm^2

Ex 49: Find the area of the three-quarter circle: (Round to 1 decimal place)



$A =$ ☐ cm^2

Ex 50: Find the area of the one-third circle: (Round to 1 decimal place)



$A =$ ☐ cm^2

H AREA FORMULAS

H.1 SOLVING PROBLEMS

Ex 51: A rectangular terrace is 8 m long and 5 m wide. The tiling costs 20 dollars per square meter.
What is the area of the terrace?

☐ m^2

What is the cost to tile the terrace?

☐ dollars

Ex 52: A triangular garden has a base of 12 m and a height of 8 m. The cost to plant grass is 5 dollars per square meter.
What is the area of the garden?

☐ m^2

What is the cost to plant grass in the garden?

☐ dollars

Ex 53: A rectangular wall is 8 m long and 5 m high. The cost to paint the wall is 20 dollars per square meter.
What is the area of the wall?

☐ m^2

What is the cost to paint the wall?

☐ dollars

Ex 54: A triangular roof has a base of 10 m and a height of 6 m. The cost to cover the roof with wood is 15 dollars per square meter.
What is the area of the roof?

☐ m^2

What is the cost to cover the roof with wood?

☐ dollars

Ex 55: A circular garden has a radius of 4 m. The cost to plant flowers is 10 dollars per square meter.
What is the area of the garden? (Round to the nearest integer)

☐ m^2

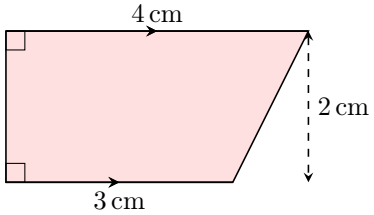
What is the cost to plant flowers in the garden? (Round to the nearest tenth)

☐ dollars

I AREA OF COMPOSITE FIGURES

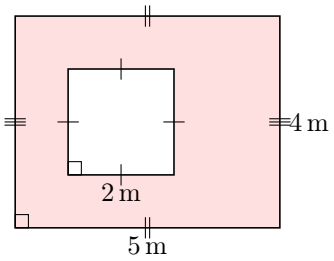
I.1 FINDING AREAS OF COMPOSITE FIGURES

Ex 56: Find the area of the figure:

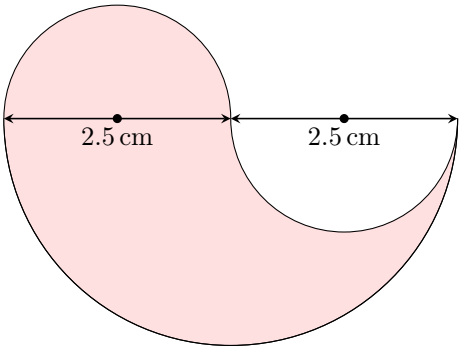


$A =$ ☐ cm^2

Ex 57: Find the area of the figure:

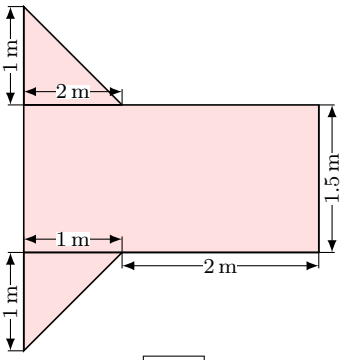


$A =$ ☐ m^2



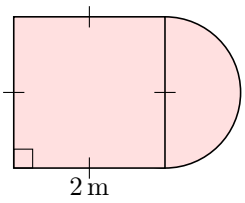
$A =$ ☐ cm^2

Ex 58: Find the area of the figure:



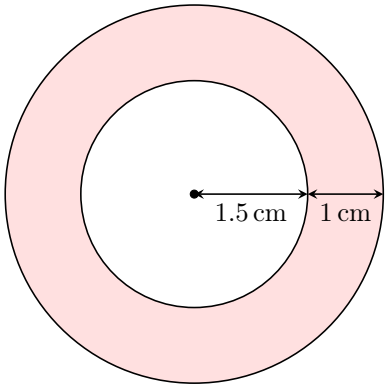
$A =$ ☐ m^2

Ex 59: Calculate the area of the figure:



$A =$ ☐ m^2 (round to 2 decimal places)

Ex 60: Calculate the area of the figure: (Round to 2 decimal places)



$A =$ ☐ cm^2

Ex 61: Calculate the area of the figure: (Round to 2 decimal places)