SCALE DIAGRAMS

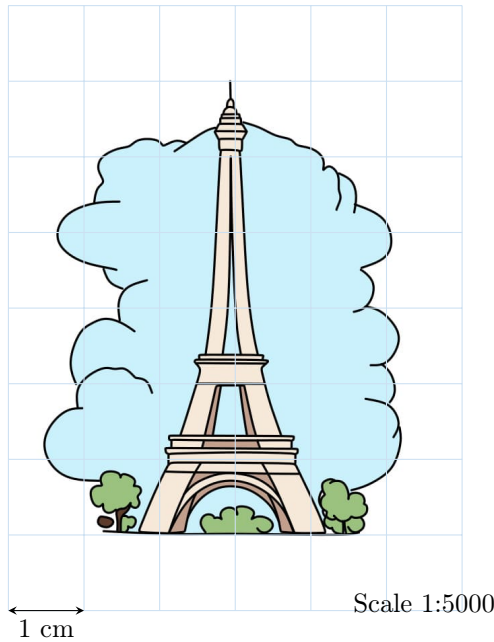## A DEFINITIONS

A.1 FINDING THE SCALE

Ex 1: For the scale 1:200, find the scale factor.
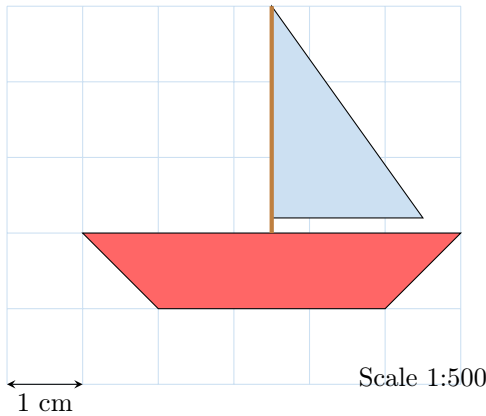
Ex 2: For the scale 1:500, find the scale factor.

Ex 3:

Scale 1:5000

1 cm

For this scale diagram, find the scale factor.

Ex 4:

Scale 1:500

1 cm

For this scale diagram, find the scale factor.

B FORMULAE

B.1 FINDING LENGTHS USING FORMULAE

Ex 5: For the scale 1:200, 6 m of actual length represents [ ] cm of drawn length.

Ex 6: For the scale 1:500, a drawn length of 4 cm represents an actual length of [ ] meters.

Ex 7: For the scale 1:1000, a drawn length of 2 cm represents an actual length of [ ] meters.

Ex 8: A drawn length of 4 cm represents an actual length of 8 m. Find the scale.

1:[ ]

Ex 9: For the scale 1:500, 10 m of actual length represents [ ] cm of drawn length.

Ex 10: For the scale 1:1000, 5 m of actual length represents [ ] cm of drawn length.
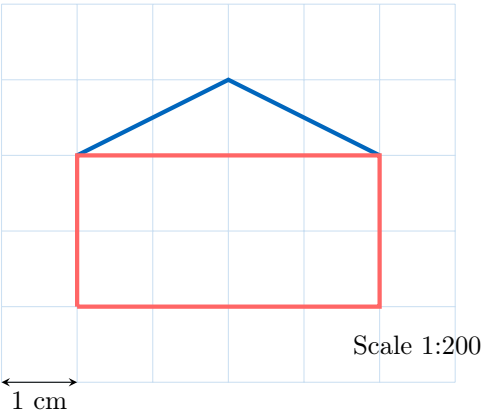
Ex 11: For the scale 1:100 000, a drawn length of 5 cm represents an actual length of [ ] kilometers.

Ex 12: A drawn length of 3 cm represents an actual length of 9 m. Find the scale.
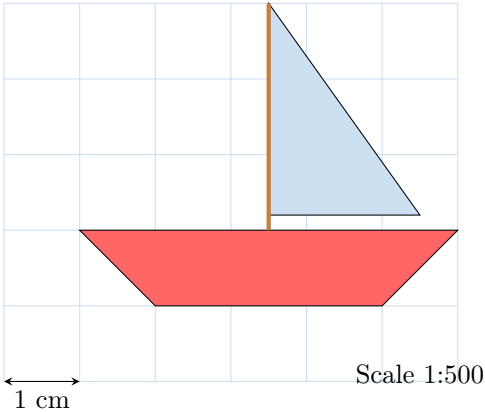
1:[ ]

B.2 FINDING THE ACTUAL LENGTHS IN SCALE DIAGRAMS

Ex 13:

Scale 1:200

1 cm

Find the actual width of the house.

[ ] m

Ex 14:

Scale 1:500

1 cm

Find the actual length of the boat.

[ ] m

Ex 15:

Scale 1:5000

1 cm
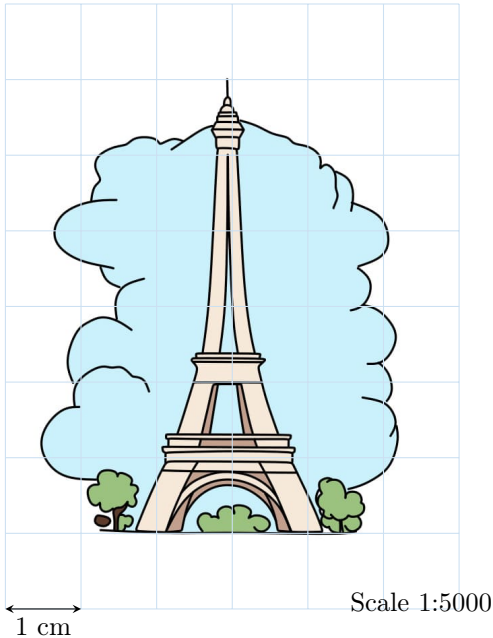
Find the actual height of the Eiffel Tower.

[ ] m

Ex 16:

Scale 1:250 000 000

1 cm
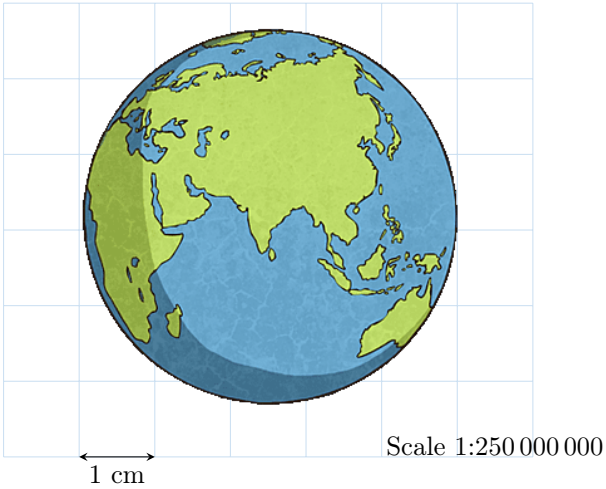
Find the actual diameter of the Earth.

[ ] km

B.3 CHOOSING THE BEST SCALE FOR A DIAGRAM

MCQ 17: You want to draw a scale diagram of your bedroom, which measures 5 m by 5 m, on a piece of white paper. The paper is 20 cm by 30 cm. Which of the following scales would be the best choice to fit your entire bedroom on the paper?

☐ 1:10

☐ 1:100

☐ 1:1000

MCQ 18: You want to draw a scale diagram of your square garden, which measures 10 m by 10 m, on a piece of white paper. The paper is 20 cm by 30 cm. Which of the following scales would be the best choice to fit your entire garden on the paper?

☐ 1:20

☐ 1:200

☐ 1:2000

MCQ 19: You want to draw a scale diagram of a swimming pool that measures 50 m by 20 m on a piece of white paper. The paper is 25 cm by 35 cm. Which of the following scales would be the best choice to fit the entire swimming pool on the paper?

☐ 1:50

☐ 1:200

☐ 1:500