

Scale Drawings and Similar Figures: math test, Grade 7 – download the PDF

Suggested time: 45 minutes. Out of 20 points. Calculator allowed only when the problem says so.

1 Scale and lengths

/ 4 pts

A map uses the scale 1 cm : 6 m.

- A path measures 3.5 cm on the map. Find its actual length.
- A pool is 90 m long. How long is it on the map?
- Write the scale as a ratio with the same unit on both sides.

2 Two rectangles

/ 4 pts

Rectangle ABCD is 4 cm by 7 cm. Rectangle A'B'C'D' is a scale drawing of ABCD with a short side of 10 cm.

- Find the scale factor.
- Find the long side of A'B'C'D'.
- Find both perimeters.
- Find both areas and compare them.

3 Distances on a map

/ 3 pts

A road map has the scale 1 in : 12 mi.

- Two towns are 3.25 in apart on the map. What is the actual distance?
- A trip is 78 mi long. How many inches does it measure on the map?

4 A living room plan

/ 4 pts

A floor plan uses the scale 1 cm : 2 ft. The living room is a rectangle 7 cm by 5 cm on the plan.

- Find the actual dimensions.
- Find the actual area.
- Find the area on the plan.
- Show that the two areas are related by the square of the scale.

5 Similar triangles

/ 3 pts

Triangle ABC has sides 5, 12, and 13. Triangle DEF is similar to it, and its shortest side is 15.

- Find the scale factor.
- Find the other two sides of DEF.
- Triangle ABC has area 30. Find the area of DEF.

6 True or false?

/ 2 pts

Say whether each statement is true or false and justify.

- If a drawing uses a scale factor of 3, the actual area is 3 times the drawing area.
- In a scale drawing, the angles are the same as in the original.



Test yourself: quick challenge for Grade 7

[Change level](#)

Level : **Grade 7**

6 random questions, instant feedback.



Start the challenge



Keep exploring with Zyro



Test solutions

Scale Drawings and Similar Figures:
math test solutions, Grade 7



Math lessons

Scale Drawings and Similar Figures:
math lesson, Grade 7



Math practice



Test solutions

Scale Drawings and Similar Figures:
math practice, Grade 7

Angles and Geometric Constructions:
math test solutions, Grade 7

 Test solutions

Circles, Area, Surface Area and Volume:
math test solutions, Grade 7

 Math lessons

Angles and Geometric Constructions:
math lesson, Grade 7

Zyro vous emmène sur nos sites partenaires

Embarquez pour d'autres planètes du savoir et leurs applis.

Décollage