

Grade 7 - Scale Drawings - Test

Common Core 7.G.A.1 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This 45-minute test checks scale drawings, including finding actual lengths and areas, scale factors, and reproducing a drawing at a different scale (Common Core 7.G.A.1). It has 9 questions worth 20 points in all. Show your work, because most questions give partial credit for correct steps.

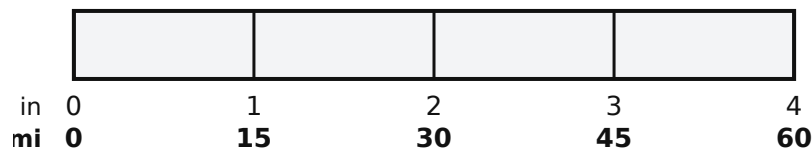
About this test

- Grade: Grade 7
- Chapter: Scale Drawings
- Standards: 7.G.A.1
- Time: 45 minutes
- Total: 20 points

Question 1 - Actual length [2 pts]

A scale drawing of a school gym uses the scale 1 in = 12 ft. The gym is 3.5 in wide on the drawing. Find the actual width.

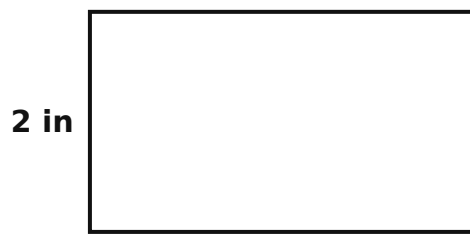
Question 2 - Find the scale [2 pts]



On a map, 4 inches stand for 60 miles.

Write the map's scale as 1 in = ? mi. Then find the actual distance for 6.5 inches.

Question 3 - Floor plan [2 pts]



3.5 in

Scale: 1 in = 8 ft

A library plan.

Find the actual length, width, and area of the library.

Question 4 - Fraction scale [2 pts]

A blueprint uses $\frac{1}{2}$ in = 3 ft. A deck is $2\frac{1}{2}$ in long on the blueprint. Find its actual length.

Question 5 - Scale factor [2 pts]

A drawing uses the scale 1 in = 8 ft. Write the scale factor as a ratio in the same units.

Question 6 - Area [2 pts]

A rug on a drawing has an area of 8 square inches. The scale is 1 in = 2 ft. Find the actual area, and explain why you do not multiply by 2.

Question 7 - Redraw at a new scale [2 pts]

A wall is 7.5 in long on a plan with scale 1 in = 4 ft. Find its length if the plan is redrawn with scale 1 in = 6 ft.

Question 8 - Patio [3 pts]



5 in

Scale: 1 in = 4 ft

A patio plan.

a. Find the actual length and width. (1 point)

- b. Find the actual area and perimeter. (1 point)
- c. Pavers cost \$4.50 per square foot. Find the cost to cover the patio. (1 point)

Question 9 - Two drawings [3 pts]

Drawing	Scale	Wall on paper
A	1 in = 2 ft	?
B	1 in = 3 ft	?

A 12-foot wall in two drawings.

- a. Find the length of the 12-foot wall in drawing A. (1 point)
- b. Find its length in drawing B. (1 point)
- c. Find how many times as long the wall is in drawing A as in drawing B. (1 point)