

Grade 8 - Distance on the Coordinate Plane - Test

Common Core 8.G.B.8 · maths-pdf.fr/en/

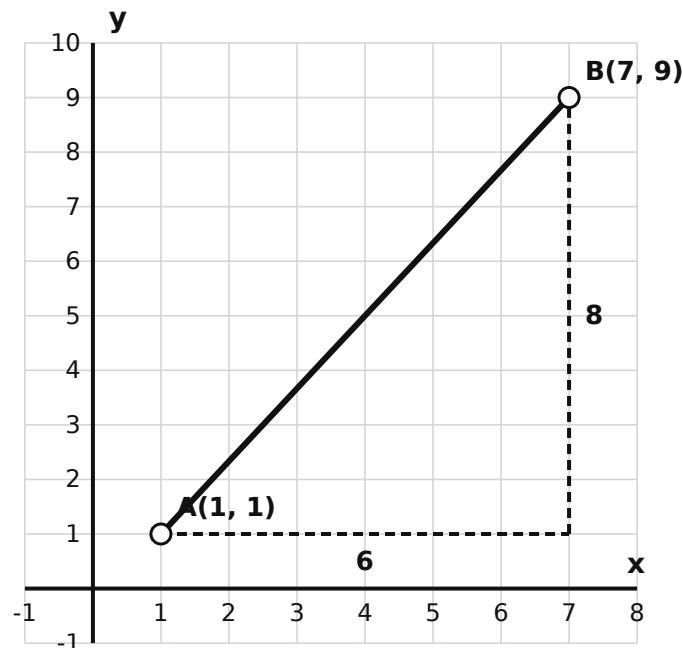
Name: _____ Class: _____ Date: ____/____/____

This 20-point test checks the distance formula on the coordinate plane, perimeters of figures and map problems (Common Core 8.G.B.8). Work alone, show every step, and write each final answer clearly. You have 45 minutes. Calculators are not needed unless a question says so.

About this test

- Grade: Grade 8
- Chapter: Distance on the Coordinate Plane
- Standards: 8.G.B.8
- Time: 45 minutes
- Total: 20 points

Question 1 - Distance [3 pts]



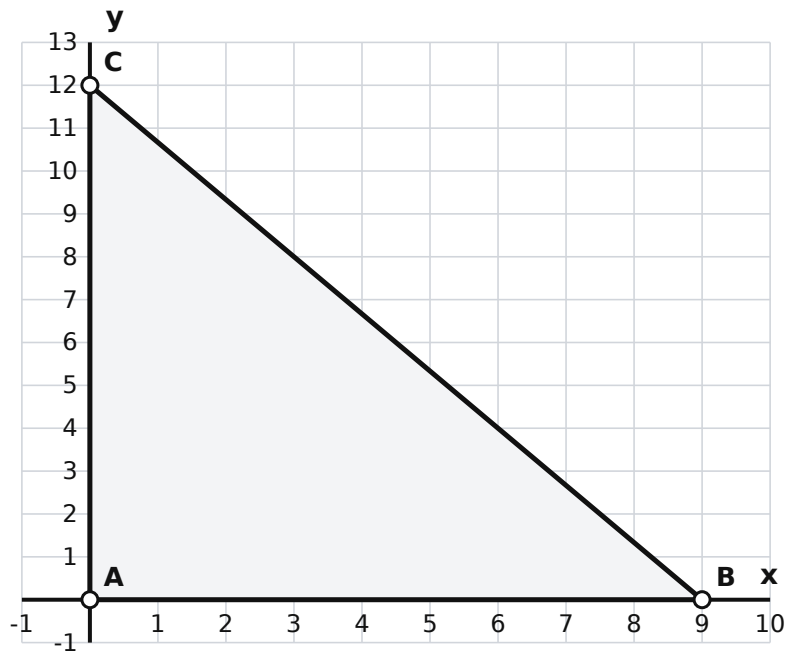
Find AB.

Find the distance between $A(1,1)$ and $B(7,9)$.

Question 2 - Estimate [2 pts]

Find the distance between $(-1,2)$ and $(4,5)$ to the nearest tenth.

Question 3 - Perimeter [3 pts]



Triangle ABC.

Find the perimeter of triangle ABC with $A(0,0)$, $B(9,0)$, $C(0,12)$.

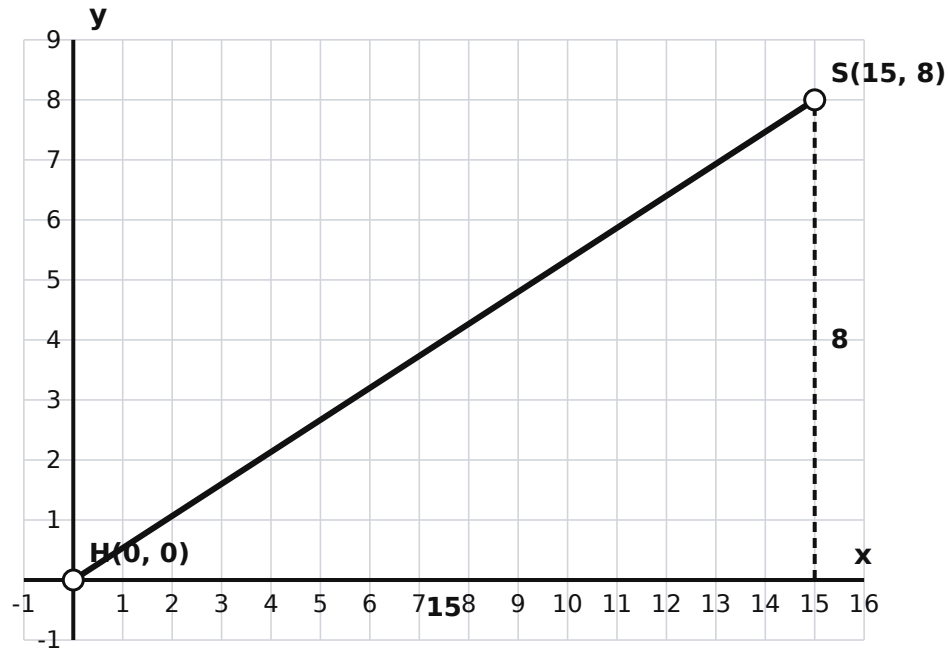
Question 4 - Right triangle? [3 pts]

Is the triangle with vertices $(0,0)$, $(5,0)$ and $(5,12)$ a right triangle? Find all three side lengths.

Question 5 - Missing coordinate [2 pts]

The distance from $(0,0)$ to $(x,12)$ is 13, with $x > 0$. Find x .

Question 6 - Map problem [3 pts]



Home H and school S , in blocks.

On a city map, a student's home is at $H(0,0)$ and the school is at $S(15,8)$, with each unit a block. How many blocks is it in a straight line? How many blocks shorter is that than walking along the streets (east then north)?

Question 7 - Compare distances [2 pts]

Which is farther from the origin, $(6,8)$ or $(7,7)$? Show your work.

Question 8 - Explain [2 pts]

Why is subtracting the coordinates enough for a horizontal segment, but not for a slanted one?