

Geometry - Points, Lines, Segments and Angles - Test

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

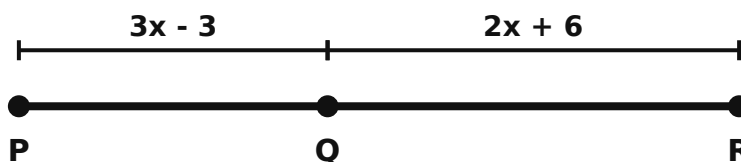
Name: _____ Class: _____ Date: ____/____/____

This 45-minute test checks segment and angle measures, midpoints, bisectors and the definitions of geometry. It has 9 questions worth 20 points in total. Show every step of the work, label diagrams, and include units where they apply. Calculators are allowed unless the teacher says otherwise.

About this test

- Grade: Geometry
- Chapter: Points, Lines, Segments and Angles
- Standards: G-CO.A.1
- Time: 45 minutes
- Total: 20 points

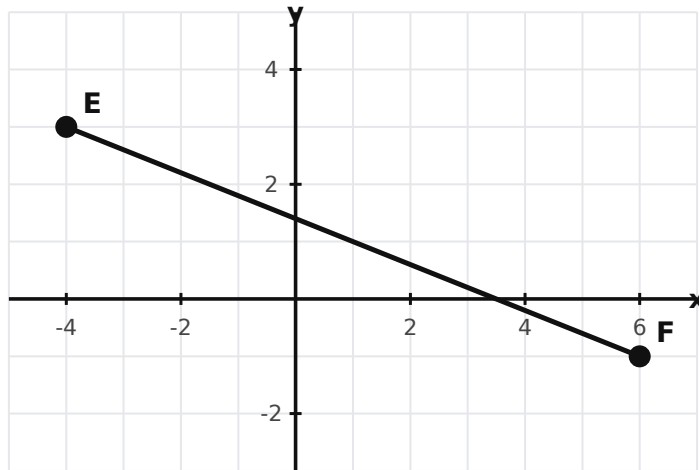
Question 1 - Segment addition [2 pts]



Q is between P and R.

$PR = 33$. Find x and PQ .

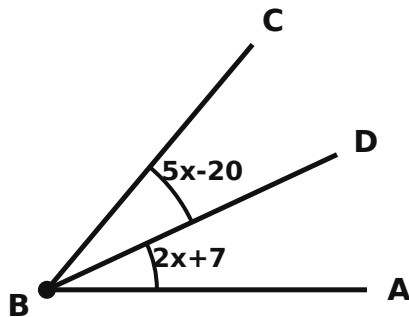
Question 2 - Midpoint and length [3 pts]



Segment EF.

- Find the midpoint of $\overline{EF}$. (1 point)
- Find $\overline{EF}$ in simplest radical form. (2 points)

Question 3 - Angle bisector [2 pts]



Ray BD bisects angle ABC.

Ray BD bisects $\angle ABC$. Find x and $m\angle ABC$.

Question 4 - Complement and linear pair [2 pts]

- An angle is $(x+12)^\circ$ and its complement is $(2x-6)^\circ$. Find x . (1 point)
- Two angles form a linear pair. One is 4 times the other. Find both measures. (1 point)

Question 5 - Definitions [3 pts]

- a. Write the definition of a circle. *(1 point)*
- b. Write the definition of perpendicular lines. *(1 point)*
- c. Explain the difference between a ray and a line segment. *(1 point)*

Question 6 - Find an endpoint [2 pts]

The midpoint of $\overline{AB}$ is $M(7,-2)$. Point A is at $(13,4)$. Find the coordinates of B.

Question 7 - Clock angle [2 pts]

Find the angle between the hour hand and the minute hand of a clock at 5:00. Then find the angle at 10:30.

Question 8 - Equal distances [2 pts]

A circle has center $C(2,-1)$ and radius 5. Decide whether $(5,3)$ is on the circle, inside it or outside it. Explain.

Question 9 - Pipeline markers [2 pts]

Markers along a straight pipeline are at 4.5 miles and 29.5 miles. A pump station is placed at the midpoint. Find the mile marker of the station and its distance from each marker.