TOPIC: **1.2 Use Segments and Congruence**	NAME: DATE:

ESSENTIAL QUESTION: **What are congruent segments?**

QUESTIONS:

NOTES:

postulate

axiom

coordinate

distance

between

congruent segments

Ruler Postulate:

The points on a line can be matched one to one with the _____ numbers. The _____ number that corresponds to a point is the _____ of the point. The _____ between points *A* and *B*, written as *AB*, is the absolute value of the difference of the coordinates of A and B.

Segment Addition Postulate:

If *B* is _____ *A* and *C*, then $AB + BC = AC$.

If $AB + BC = AC$, then *B* is _____ *A* and *C*.

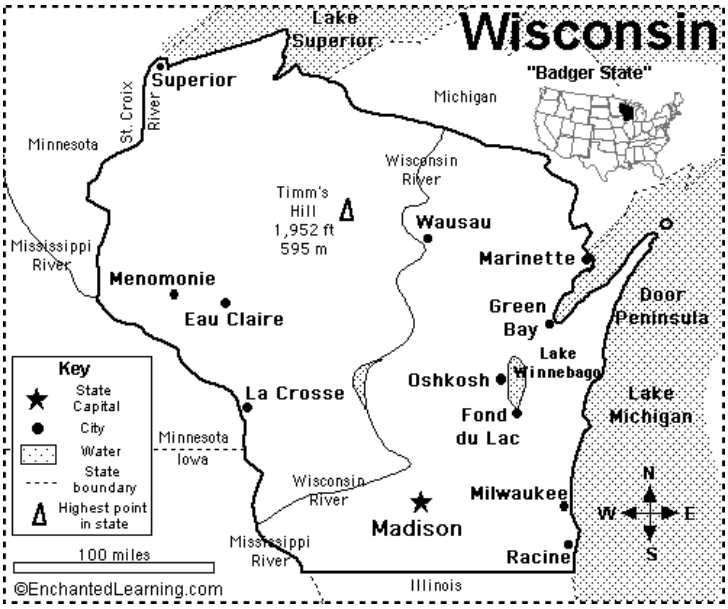
SUMMARY:

QUESTIONS:

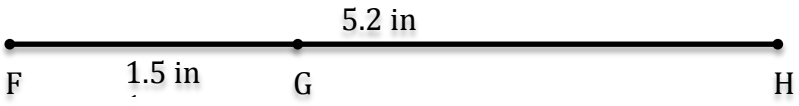
NOTES:

A1. Measure segment *JK* to the nearest tenth of a centimeter.

A2. On the map to below, it appears that Milwaukee, Oshkosh, and Wausau lie approximately in a straight line. If Milwaukee and Wausau are 188.1 miles apartand Oshkosh and Wausau are 102.9 miles apart, how many miles apart are Oshkosh and Milwaukee?



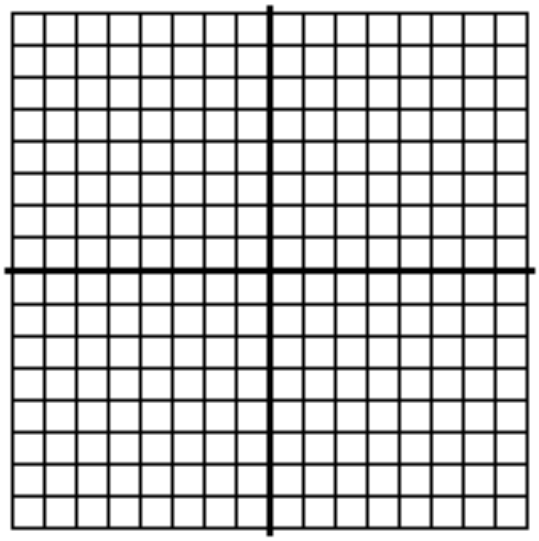
A3. Use the diagram to the left to find *GH.*



QUESTIONS:

NOTES:

A4. Plot J(-3, 4), K(2,4), L(-2,2) and M(1,-2) on a coordinate plane. Then determine whether $\overline{JK}$ and $\overline{LM}$ are congruent.



A5. In the diagram, points A, B, C, and D are collinear, points C, X, Y, and Z are collinear, AB = BC = CX = YZ, AD = 54, XY = 22, and XZ = 33. Find the indicated length.

a. AB

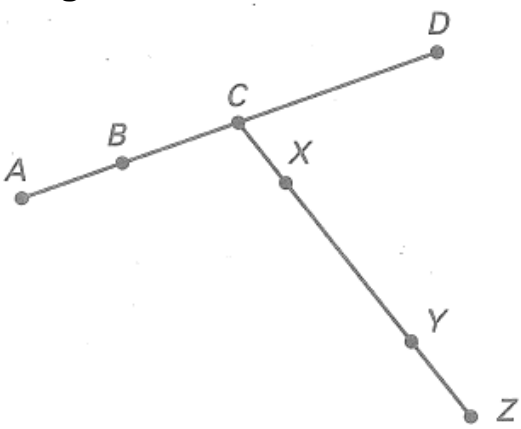
b. BD

c. CY

d. CD

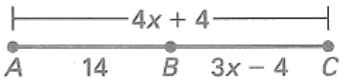
e. XC

f. CZ



A6. Find the indicated length.

a. *AC*



b. *NP*