

Geometry

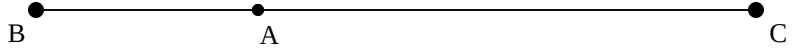
Segment and Angle Addition Practice

Name:

Date:

Period:

1. Let A be a point between points B and C. Use the Segment Addition Postulate.
 $AB = 13$ and $BC = 48$. Find AC.

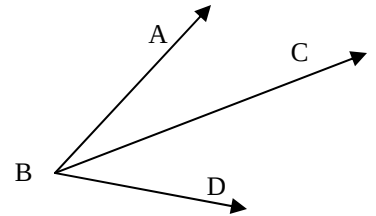


2. Let A be a point between points B and C. Use the Segment Addition Postulate.
 $AB = 2.3$ and $AC = 5.4$. Find BC.

3. Let R be a point between points S and T. Use the Segment Addition Postulate to solve for y.
 $SR = 5y - 4$ $RT = 3y + 2$ $ST = 22$

4. Let A be a point between points B and C. Use the Segment Addition Postulate to solve for y.
 $AB = 2y + 6$ $BC = 6y - 12$ $BC = 42$

5. If the $m \angle ABC = 32^\circ$ and $m \angle CBD = 54^\circ$, what is $m \angle ABD$?



6. T is in the interior of $\angle RSU$.
If the $m \angle RST = 32^\circ$ and $m \angle TSU = 54^\circ$, what is $m \angle RSU$?

7. D is a point on the interior of $\angle ABC$. If the $m \angle ABD = 2x + 13^\circ$, $m \angle DBC = 5x + 3^\circ$,
and $m \angle ABC = 86^\circ$. Find the value for x.

8. D is a point on the interior of $\angle ABC$. If the $m \angle ABD = 6x + 3^\circ$, $m \angle DBC = 2x - 23^\circ$,
and $m \angle ABC = 68^\circ$. Find the value for x.