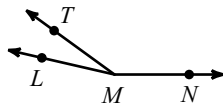
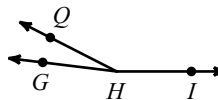


Angle Addition Postulate & Segment Addition Postulate Date _____ Period _____

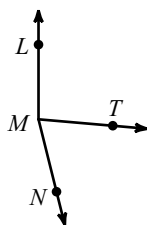
- 1) Find $m\angle LMN$ if $m\angle LMT = 23^\circ$ and $m\angle TMN = 144^\circ$.



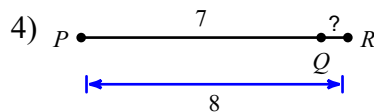
- 2) Find x if $m\angle GHI = 173^\circ$, $m\angle GHQ = 29 + x$, and $m\angle QHI = x + 162$.



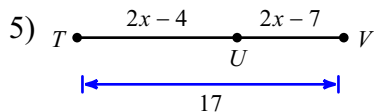
- 3) $m\angle TMN = x + 72$, $m\angle LMN = 166^\circ$, and $m\angle LMT = 96 + x$. Find $m\angle LMT$.



Find the length indicated.

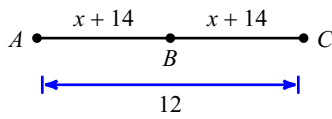


Solve for x .

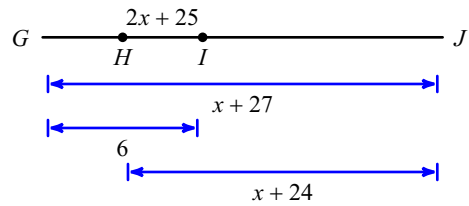


Find the length indicated.

6) Find AB



7) Find HJ



Points A, B, C, and D are collinear and positioned in that order. Find the length indicated.

8) Find BC if $AC = 15$, $BD = 16$, and $AD = 19$.

Points A, B, C, and D are collinear and positioned in that order. Solve for x .

9) $AB = 2x + 30$, $AD = x + 32$, $CD = 8$, and $BC = 5$. Find x .

Points A, B, C, and D are collinear and positioned in that order. Find the length indicated.

10) Find BC if $BD = x + 29$, $AD = x + 39$, $AC = 20$, and $BC = x + 19$.