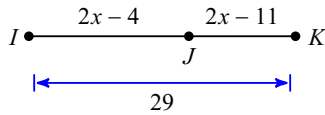


1.REV.2 ~ Lessons 1.1 - 1.5

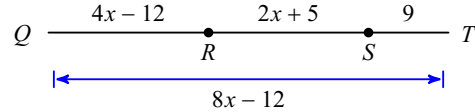
Past due on _____ Period _____

Use the Segment Addition Postulate to find the value of x and the length of the indicated segment.

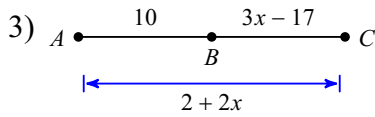
1) Find IJ



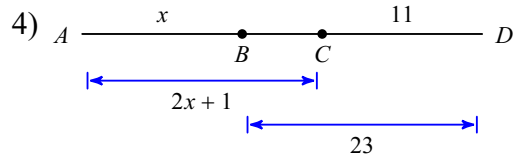
2) Find RS



Is B the midpoint of \overline{AC} ? Explain your reasoning.

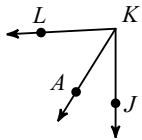


Are any segments on \overline{AD} congruent? Explain your reasoning.

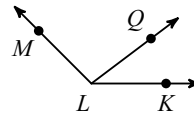


Use the Angle Addition Postulate to find the value of x and the measure of the indicated angle.

5) $m\angle JKA = 2x + 8$, $m\angle JKL = 87^\circ$, and $m\angle AKL = 4x + 7$. Find $m\angle AKL$.

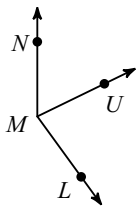


6) $m\angle MLQ = 33x - 1$, $m\angle QLK = 11x + 4$, and $m\angle MLK = 135^\circ$. Find $m\angle MLQ$.



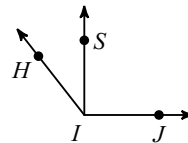
Is \overline{MU} an angle bisector? Explain your reasoning.

7) Find x if $m\angle UML = x + 82$, $m\angle NML = 144^\circ$, and $m\angle NMU = x + 66$.



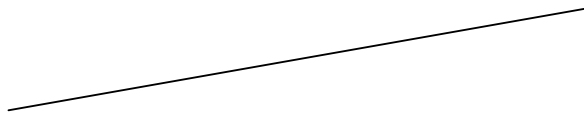
Is $\angle SIJ$ a right angle? Explain your reasoning.

8) Find x if $m\angle SIJ = 9x$, $m\angle HIJ = 128^\circ$, and $m\angle HIS = 3x + 8$.



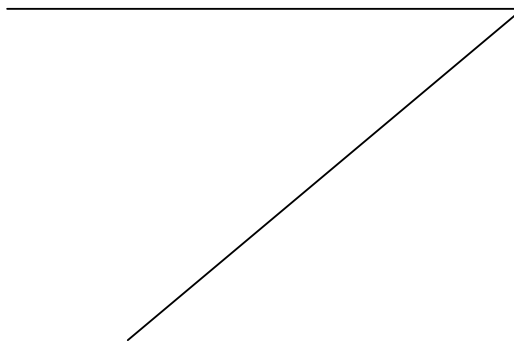
Construct the segment bisector and locate the midpoint of the segment shown.

9)



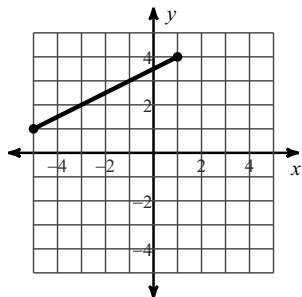
Construct the angle bisector of the angle shown.

10)



Find the length of the segment shown. Simplify any square roots.

11)



12) Find the midpoint and slope of the segment in #11. Fractions must be expressed in simplest form.

Find the other endpoint of the line segment with the given endpoint and midpoint.

13) Endpoint: $(-3, -2)$, midpoint: $(-5, 4)$

14) Endpoint: $(6, 12)$, midpoint: $(-5, 2)$

15) \overline{AZ} has a length of 5 units; $A(-12, -9)$ and $Z(x, -13)$. Find the missing coordinate x .

16) On a number line, J is at -3 and B is at 5 . What is the location of D such that JD is $\frac{2}{3}$ the length of \overline{JB} from J to B ?

17) Given the points $M(-2, 4)$ and $E(7, -2)$, find the coordinates of the point O on the directed line segment \overline{ME} that partitions \overline{ME} in the ratio $2:1$.