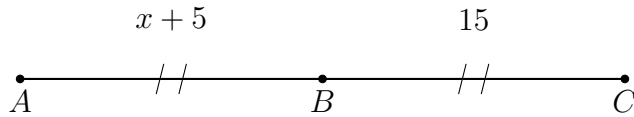


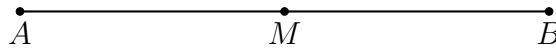
Name:

1.4 Classwork: Midpoints and bisectors

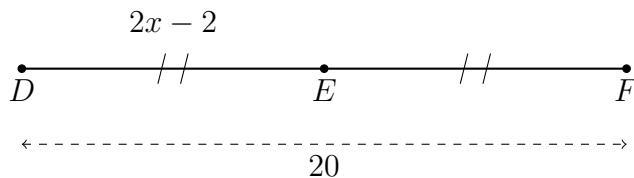
1. Point B is the midpoint of \overline{AC} , with $AB = x + 5$, $BC = 15$. First write an equation representing the situation, find x , then check it.



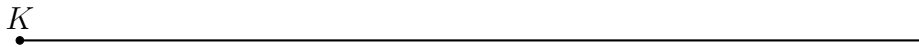
2. Given M is the midpoint of \overline{AB} , $AM = 5x + 2$, $MB = 22$.
- Mark the diagram with the values and tick marks
 - Write an equation and solve for x
 - Check your result



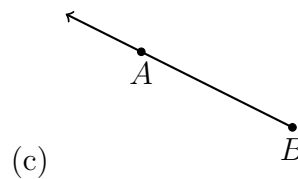
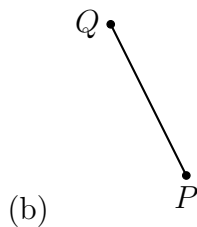
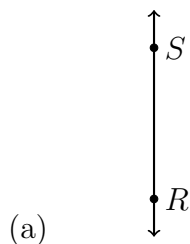
3. Point E bisects \overline{DF} and $DE = 2x - 2$, $DF = 20$. Find x . (show check)



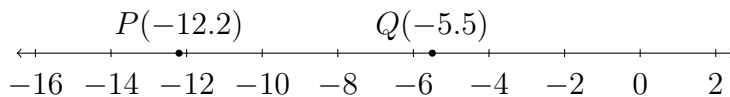
4. Two line segments or angles of equal measure are _____.
5. Points on the same plane are _____.
6. Mark point L on the ray exactly 8 centimeters from the endpoint K . (measure it)



7. Name each object using symbolic notation.



8. Two points $P(-12.2)$, $Q(-5.5)$ are shown on the number line. Find PQ .



9. Assume that Dr. Huson's rides to school straight north from 80th Street to 164th Street.
- (a) How many blocks is his morning commute?
- (b) On what street is Dr. Huson's half way each morning?
- (c) In the afternoon return commute, what street is half way?