

Day 2 **Puzzle: What Is a Line's Favorite Kind of Fruit?**

Measuring Segments

Look for your answer in the key at the right and put the corresponding letter in the answer blank at the bottom of the page.

1. Points A , B , and C are collinear and A is between B and C .

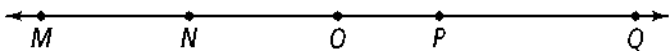
$$AB = 4x - 3, BC = 7x + 5, \text{ and } AC = 5x - 16.$$

Find each value.

- BC
 - AB
 - AC
2. On a number line, $G = 8$ and $H = -3$. If H is the midpoint of \overline{GI} , find the coordinate of I .

3. J is the midpoint of \overline{KL} . Find KJ if $KL = 38$.

For 4–6, refer to the number line below.



4. Suppose O is the midpoint of \overline{MQ} and N is the midpoint of \overline{MO} . If $NO = 8$, find MQ .

5. Suppose P is the midpoint of \overline{NQ} , $OP = 11$, and $OQ = 35$. Find NO .

6. If $NO = 2y + 11$, $OP = 3y - 2$, $NP = 6y + 3$, and $MP = 64$, find each value.

- NO
- MN

a	-14
b	20
c	-18
d	-13
e	32
f	3
g	23
h	39
i	16
j	41
k	-11
l	12
m	13
n	89
o	44
p	-26
q	6
r	19
s	45
t	25
u	42
v	10
w	-7
x	16
y	27
z	50

An $\frac{\quad}{1c} \frac{\quad}{3} \frac{\quad}{2} \frac{\quad}{1a} \frac{\quad}{6a} \frac{\quad}{4}$ because it is made of $\frac{\quad}{1b} \frac{\quad}{4} \frac{\quad}{6a} \frac{\quad}{5} \frac{\quad}{4} \frac{\quad}{1a} \frac{\quad}{6b} \frac{\quad}{1b}$.