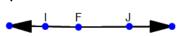
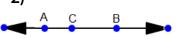
Name: \_\_\_\_\_

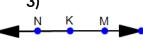
## **Distance, Segment, and Rays**

Use the segment addition postulate to write an equation for the segment.

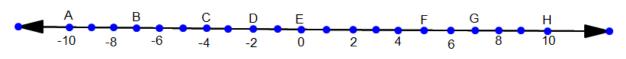
1)







Find the indicated distance using the given number line.



- 4) AC
- 5) CF

- 6) EB
- 7) GF

- 8) HD
- 9) GA

10) DA

11) BH

For the given coordinate of G and H, find GH.

13) G:4
$$\frac{4}{5}$$
; H:8

12) G:-7; H:5 13) G:
$$4\frac{4}{5}$$
; H:8 14) G:-6.2; H:-2.5

Give three names for the indicated ray.



- 15) Endpoint C containing H.
- 16) Endpoint D containing E.
- 17) Endpoint B containing A.

## Use the given information, to answer each of the following questions

18) A, B, and C are three collinear points such that B is between A and C.

$$AB = \frac{3}{4}BC$$
 and  $AC = 28$ . Find AB.

19) P, Q, and R are three collinear points such that Q is between P and R.

$$PQ = \frac{4}{7}QR$$
 and  $PR = 33$ . Find QR.

- 20) For  $\overline{AB}$ , the coordinate of A is -6 and AB = 7. Find all possible coordinates of point B.
- 21) A, B, and C are three collinear points such that B is between A and C.

$$AB = \frac{3}{7}AC$$
 and  $AB = 9$ . Find BC.

- 22) Point T is on  $\overrightarrow{MG}$ , but T is not in between points M and G. MG =  $\frac{5}{4}$  GT and MT = 18. Find MG.
- 23) For  $\overline{GH}$ , the coordinate of G is 2x 6 and the coordinate of H is x 5. Find the coordinate of G if GH = 6.