RTI Geometry
Congruence & Segment Addition

Name_____
Date:_____HR :____

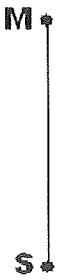
1. Describe the figure as a point, line, segment, or ray.

a) _____

b) _____

c) _____

d) _____



e) _____

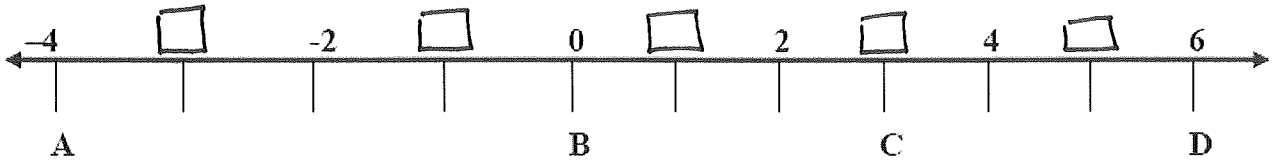
f) _____

2. RS ≅ TU, ST = 9, RU = 33
the figure is not drawn to scale

a) Find RS

b) Find SU.

For questions 3-8, refer to the number line below to find each measure. Fill in #line 1st.



3. AB

4. CD

5. BD

6. CB

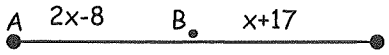
7. DA

8. AC

must show all work!

Refer to the figure and the given information to find each measure. Not midpoint!

9. Given : AC = 39 m

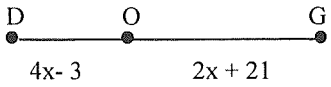


x = _____

AB = _____

BC = _____

10. Given the figure and DG = 60 ft.

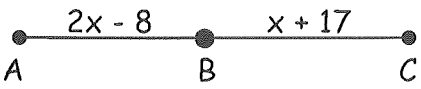


x = _____

DO = _____

OG = _____

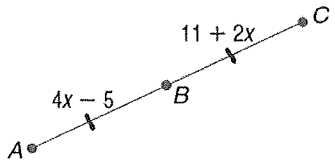
11. B is the midpoint of AC.



x = _____ AB = _____

BC = _____ AC = _____

12. Find the measure of $\overline{BC}$ if B is the midpoint of $\overline{AC}$.



X= _____ BC= _____

RTI Geometry
Congruence & Segment Addition

Name Key
Date: ____ HR : ____

1. Describe the figure as a point, line, segment, or ray.

a) Ray AB

b) Segment XY

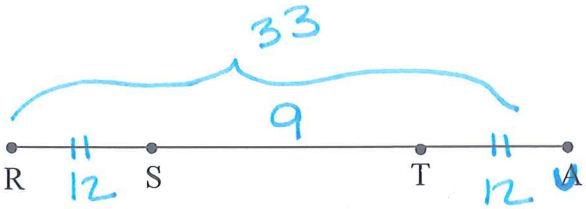
c) line JP

d) Segment MS

e) Ray WP

f) line KP

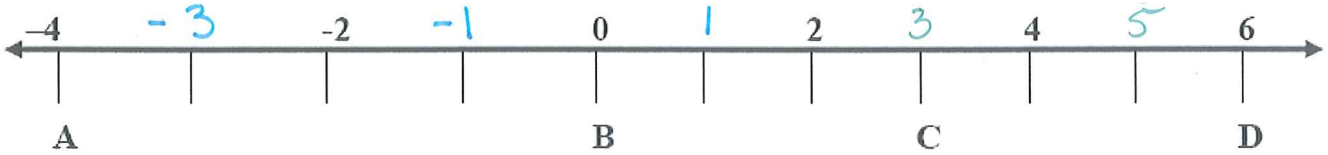
2. RS = TU, ST = 9, RU = 33



a) Find RS = 12

b) Find SU. = 21

For questions 3-8, refer to the number line below to find each measure.



3. AB -4 to 0 = 4 units

4. CD 2 to 6 = 4 units

5. BD 0 to 6 = 6 units

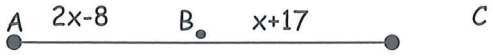
6. CB 0 to 3 3 units

7. DA -4 to 6 10 units

8. AC -4 to 3 7 units

Refer to the figure and the given information to find each measure.

9. Given : AC = 39 m



$AC = AB + BC$

$39 = 2x - 8 + x + 17$

$39 = 3x + 9$

$30 = 3x$

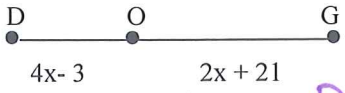
$10 = x$

x = 10

AB = 12m

BC = 27m

10. Given the figure and DG = 60 ft.



$DO + OG = DG$

$4x - 3 + 2x + 21 = 60$

$6x + 18 = 60$

$6x = 42$

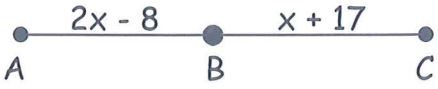
$x = 7$

x = 7

DO = 25 ft

OG = 35ft

11. B is the midpoint of AC.



$AB \cong BC$ def of midpt

$2x - 8 = x + 17$

$-x \quad -x$

$x - 8 = 17$

$+8 \quad +8$

$x = 25$

x = 25

AB = 42

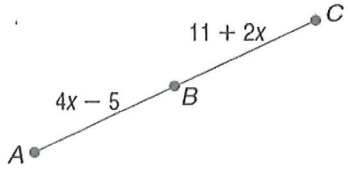
BC = 42

AC = 84

$AB = 2(25) - 8$

$BC = 25 + 17$

12. Find the measure of $\overline{BC}$ if B is the midpoint of $\overline{AC}$.



$AB \cong BC$ def of midpoint

$4x - 5 = 11 + 2x$

$2x - 5 = 11$

$2x = 16$

$x = 8$

$BC = 11 + 2(8)$

$BC = 27$