

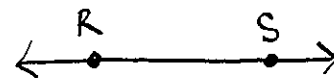
Chapter 1 Review

SECTION **1A** Ready to Go On? Quiz

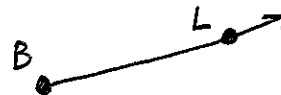
1-1 Understanding Points, Lines, and Planes

Draw and label each of the following.

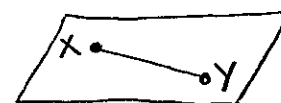
1. a line containing points R and S



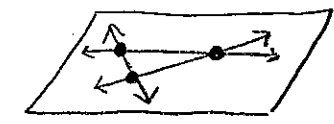
2. a ray with endpoint B that passes through L



3. a plane containing a segment with endpoints X and Y



4. three coplanar lines intersecting in three points.



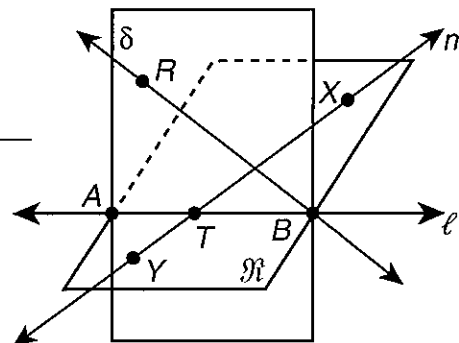
Name each of the following.

ex: 5. three collinear points A, T, B

6. a plane containing $X, B,$ and Y R

ex: 7. two segments \overline{TB} & \overline{RB}

ex: 8. a line containing A and T l or \overleftrightarrow{AT}



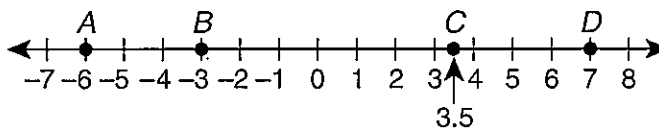
1-2 Measuring and Constructing Segments

Find the length of each segment.

9. \overline{DB} 10

10. \overline{AB} 3

11. \overline{AC} 9.5

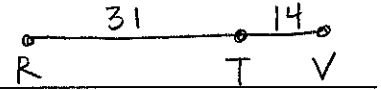


12. Sketch, draw, and construct a segment congruent to \overline{PQ} .



SECTION 1A

Ready to Go On? Quiz continued



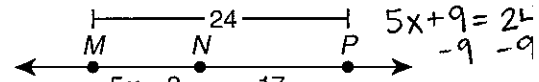
13. T is between R and V . $RV = 31$ and $VT = 14$. Find RT .

45

$$5x - 8 + 17 = 24$$

14. N is between M and P . Find MN .

7



$$5x + 9 = 24$$

$$-9 \quad -9$$

M is the midpoint of \overline{AB} . $AM = 11x - 9$, and $BM = 7x + 35$.

$$\frac{5x}{5} = \frac{15}{5}$$

15. Find x .

$x = 11$

16. Find AM .

$AM = 112$

17. Find BM .

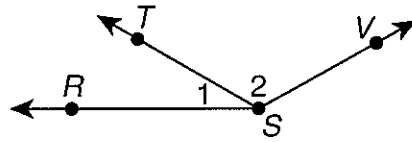
$BM = 112$

$$x = 3$$

1-3 Measuring and Constructing Angles

18. Name all the angles in the diagram.

$\angle RST$ & $\angle TSV$



$$11x - 9 = 7x + 35$$

$$-7x \quad -7x$$

$$4x - 9 = 35$$

$$+9 \quad +9$$

$$\frac{4x}{4} = \frac{44}{4}$$

Classify each angle by its measure. (Acute, right, or obtuse)

19. $m\angle XYZ = 90^\circ$

right

20. $m\angle PQR = 17^\circ$

acute

21. $m\angle BRZ = 178^\circ$

obtuse

$$x = 11$$

~~22. \overline{MT} bisects $\angle LMP$, $m\angle LMT = (4x - 13)^\circ$ and $m\angle TMP = (2x + 17)^\circ$. Find $m\angle LMP$.~~

~~23. Use a protractor and a straightedge to draw a 70° angle. Then bisect the angle.~~

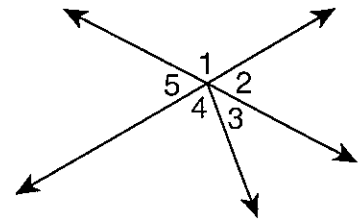
1-4 Pairs of Angles

Tell whether the angles are only adjacent, adjacent and form a linear pair, or not adjacent.

24. $\angle 2$ and $\angle 3$ adjacent

25. $\angle 1$ and $\angle 5$ adjacent & linear pair

26. $\angle 3$ and $\angle 1$ not adjacent



If $m\angle P = (9x + 20)^\circ$, find the measure of each of the following.

~~27. supplement of $\angle P$~~

~~28. complement of $\angle P$~~

SECTION 1A

Ready to Go On? Skills Intervention

1-1 Understanding Points, Lines, and Planes

Find these vocabulary words in Lesson 1-1 and the Multilingual Glossary.

Vocabulary				
point	line	plane	collinear	coplanar
segment	endpoint	ray	opposite rays	

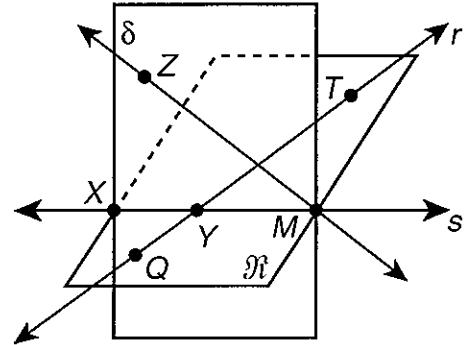
Naming Points, Lines, and Planes

A. Name collinear points.

Points that lie on the same line are collinear

Name three points on line r . T, Y, Q

Name the points on line s . X, Y, M



B. Name lines.

To name a line, use either lower case letter,

or two points.

Name line s using two points on the line. \overleftrightarrow{XM} or \overleftrightarrow{XY} or \overleftrightarrow{YM}

Name the line containing point Z . \overleftrightarrow{ZM}

Identifying Points and Lines in a Plane

Name three points that lie in the same plane as point Z .

In what plane does Z lie? σ

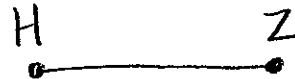
What other points lie in this plane? Z, X, Y, M, Q

Drawing Segments and Rays

Draw and label each of the following.

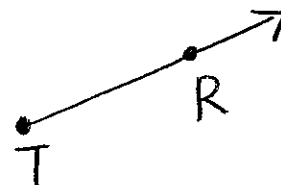
A. A segment with endpoints H and Z

Draw two dots and label them H and Z
Use a straightedge to connect the points.

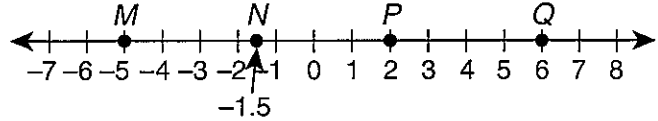


B. ray \overrightarrow{TR}

Draw two dots and label them T and R .
Beginning at T , connect the points and extend through R .
Draw an arrow to indicate that the ray extends forever.

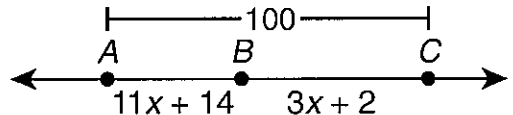


1. Find the length of each segment.



- A. MN 3.5 B. NQ 7.5
 C. MP 7 D. MQ 11

2. Use the picture at the right.



a. Set up an equation for the situation.

$$\begin{aligned} 11x + 14 + 3x + 2 &= 100 \\ 14x + 16 &= 100 \\ -16 &\quad -16 \\ 14x &= 84 \\ \frac{14x}{14} &= \frac{84}{14} \\ x &= 6 \end{aligned}$$

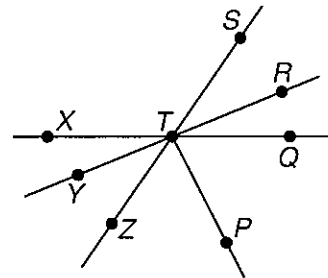
b. Solve the equation for x.

$$x = 6$$

c. Find the following lengths:

AB 80 BC 30 AC 110

3. Use the diagram at the right.



examples

- a. Name three acute angles.
 $\angle STR, \angle RTQ, \angle QTP$
 b. Name three obtuse angles.
 $\angle STP, \angle STY, \angle XTR$
 c. Name three straight angles.
 $\angle XTQ, \angle YTR, \angle ZTS$

4. $\angle A$ and $\angle B$ are complementary. If $\angle A = 47$, find $m\angle B$.

adds to 90

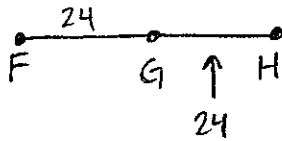
$$90 - 47 = \boxed{43^\circ}$$

5. $\angle X$ and $\angle Y$ are supplementary. If $\angle X = 123$, find $m\angle Y$.

adds to 180

$$180 - 123 = \boxed{57^\circ}$$

6. G is the midpoint of F and H. $FG = 24$. Find FH. Hint: draw a picture!



$$24 + 24 = \boxed{48}$$

Fill in the blank. Write each vocabulary word next to its definition.

WORD BANK

adjacent angles
collinear
complementary
congruent angles
coplanar
supplementary

intersection
line
linear pair
non-coplanar
obtuse

point
plane
ray
right angle
segment

- point 1) An object that names a specific location and has no size.
- non-coplanar 2) A set of points that do NOT lie on the same plane.
- segment 3) A portion of a line that has two endpoints.
- obtuse 4) An angle that measures MORE THAN 90° .
- adjacent 6) Two angles that are next to each other and share a common side.
- complementary 7) Two angles that add up to 90° .
- congruent angles 8) Two angles that have the same measure.
- collinear 10) Points that lie on a straight line.
- line 11) A straight path that has no width and extends forever in two directions.
- intersection 12) The place where two figures cross.
- linear pair 13) Two adjacent angles that form a straight line.
- supplementary 14) Two angles that add up to 180° .
- coplanar 15) A set of points that all lie on the same plane.