Spiral Review

1. Find x if GH = 50

2x $+$ 3x-10

G   T   H

50

2x+3x-10=50
5x-10=50
+10 +10

5x=60
$\frac{5x}{5}$ $\frac{60}{5}$

x=12

3. Name a line.

ZL, XZ

4. Name a plane.
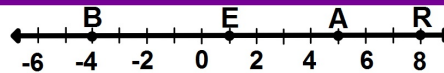
LVZ

5. Name three collinear points.

L,X,Z
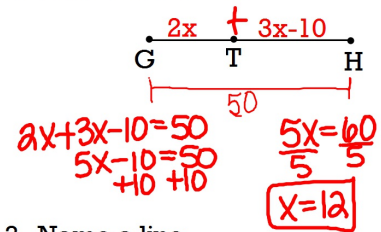
2. Find x if $\overline{JK} \cong \overline{ST}$, JK = 4x - 9
ST = 5x - 15

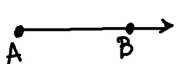## Review 1.3

B   E   A   R
-6   -4   -2   0   2   4   6   8
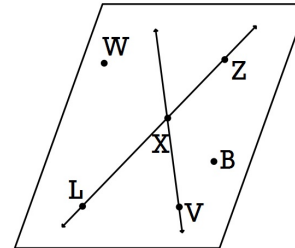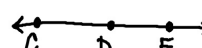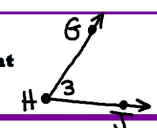
1. Find BR.

2. Find the midpoint of $\overline{ER}$.

3. Find the distance between P(-2,5) and Q(4,-3).

Section 1.4 Angle Measure

term	example	name
ray part of a line endpoint on one end/ other end goes on indefinitely	A •———————•→ B	2 letters $\overrightarrow{AB}$
opposite rays 2 rays that share an endpoint and form a line	←•———•———•→ C D E	$\overrightarrow{DE}$ $\overrightarrow{DC}$
angle 2 rays with a common endpoint has 2 sides (rays) & a vertex (point)	G↗ H•⟋3 →J	1 letter (vertex) ∠H use # (vertex) ∠3 3 letters ∠GHJ or ∠JHG

interior points:

exterior points:

Example 1:
a. Give another name for angle 5.

∠GBE or ∠GBF

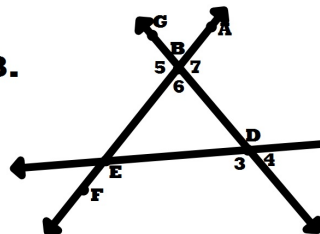**b. Name the vertex for angle 3.**

D   (point)

c. Name the sides of angle 7.

$\overrightarrow{BA}$, $\overrightarrow{BD}$ (2 rays)

d. Name a point on the exterior of angle 6.

G or A   (outside)
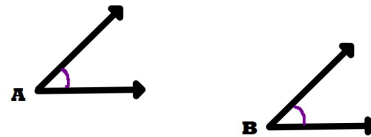
Classify angles by their measures

Acute angle: angle that measures <u>less than 90°</u>

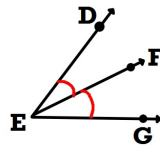**Right angle**: angle that measures <u>90°</u>

Obtuse angle: angle that measures <u>between 90° & 180°</u>

Straight angle: angle that measures <u>180°</u>

Congruent angles: angles with the same measure

Angle bisector: ray that divides an angle in half

Example 2: In the figure, $\overrightarrow{BA}$ and $\overrightarrow{BC}$ are opposite rays, $\overrightarrow{BH}$ bisects $\angle EBC$

a.) If $m\angle ABE = 2n + 7$ and $m\angle EBF = 4n - 13,$ find $m\angle ABE$

(set equal) $2n+7=4n-13$

$n=10$

$m\angle ABE = 2(10)+7$

$\boxed{m\angle ABE = 27°}$

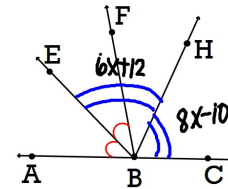**b.)** If $m\angle EBH = 6x + 12$ and $m\angle HBC = 8x - 10,$ find $m\angle EBH$
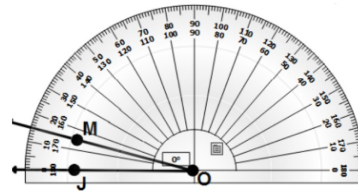
(set equal) $6x+12=8x-10$

$x=11$

$m\angle EBH = 6(11)+12$

$\boxed{m\angle EBH = 78°}$

F
E   6x+12   H
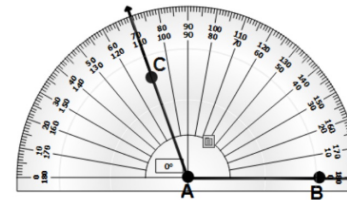8x-10
A   B   C

Examples using protractor.

Name the angle: $\angle MOJ$

Classify the angle: acute

Measure the angle: $15°$

Name the angle: $\angle CAB$

Classify the angle: obtuse

Measure the angle: $110°$

Turn in:
wkst: Naming Angles

Homework:
p. 41 (12-28, 39-42)