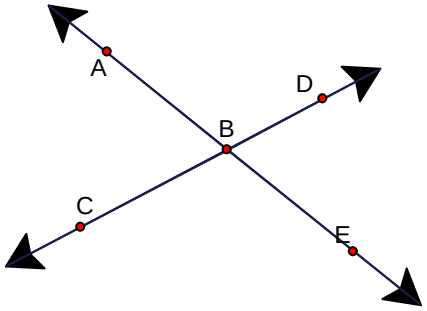
GAT Review – Angles, Lines, Rays, Segments and Polygons

Name_____
class _____ date _____

1. On the number line below, if AC = 18, BD = 27, and AD = 32, find BC

2. Use the following drawing:



A. $\overrightarrow{AB} \cap \overrightarrow{EA}$ = _____

B. $\overrightarrow{AB} \cup \overrightarrow{EA}$ =_____

C. $\overrightarrow{BC} \cap \overrightarrow{BE}$ = _____

D. $\overrightarrow{BC} \cup \overrightarrow{BE}$ =_____

3. Using the diagram, give an example of:

A. An obtuse angle_____

B. A linear pair_____

C. A right angle _____

D. Vertical angles _____

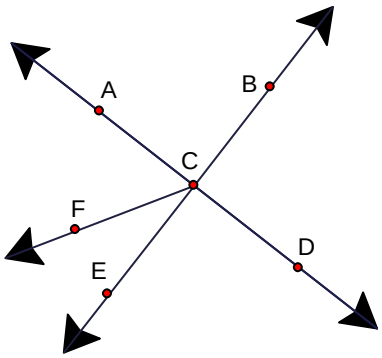
E. Perpendicular lines _____

F. Supplementary angles _____

G. Adjacent angles _____

I. Complementary angles _____

$\overleftrightarrow{AD} \perp \overleftrightarrow{BE}$



4. Two angles whose sum is 90 degrees are called _____

5. Rays, segments, and lines which intersect at right angles are called

_____

6. Two non adjacent angles formed by two intersecting lines are called _____

10 . Draw a diagram of the condition
Set up the needed equations and solve
Find the measures of the missing angles

Angle ABE and angle EBC form a linear pair.

$m\angle ABE = 7(x - 3) + 3(2x - 4)$

$m\angle EBC = 19 - 2(5 - 2x)$

Angle ABE and angle DBC form vertical angles and angle ABD and angle ABE are supplementary;. Set up the diagram and label it correctly, find the measures of the angles by showing all of your algebra work

$m\angle ABE = 3(5x - 6y) + 16$

$m\angle DBC = 8 - 2(3y - 5x)$

$m\angle ABD = 10(4x - 3y) - 84$