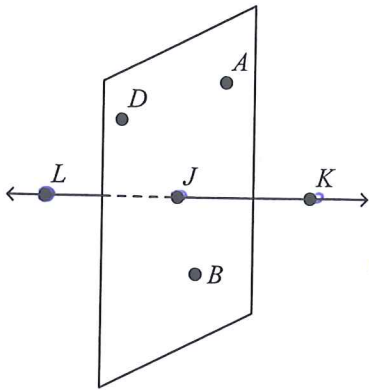# Geometry Review #1

Multiple Choice
Identify the choice that best completes the statement or answers the question.
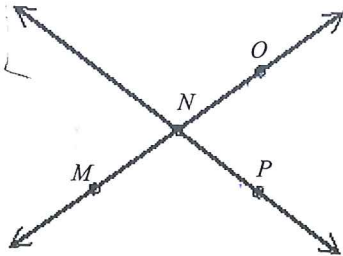
D   1. What are the names of three collinear points?

Co linear → all on the same line

a. Points D, J, and K are collinear.   b. Points A, J, and B are collinear.   c. Points D, J, and B are collinear. **d.** Points L, J, and K are collinear.
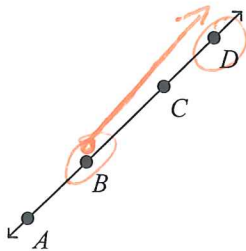
A   2. Are O, N, and P collinear? If so, name the line on which they lie.
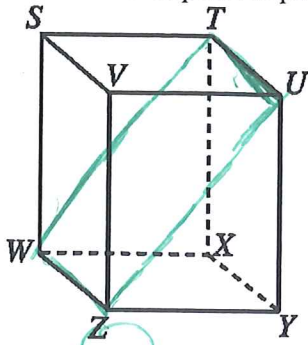

Not colinear

a. No, the three points are not collinear.   b. Yes, they lie on the line MP.   c. Yes, they lie on the line NP. d. Yes, they lie on the line MO.

D   3. What is the name of the ray that is opposite $\overrightarrow{BA}$?

a. $\overrightarrow{BD}$ b. $\overrightarrow{BA}$ c. $\overrightarrow{CA}$ d. $\overrightarrow{DA}$
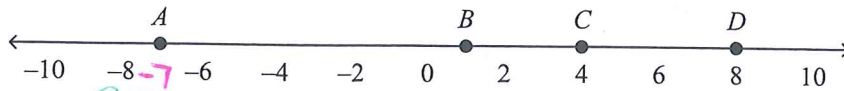
B 4. Name a fourth point in plane TUW.
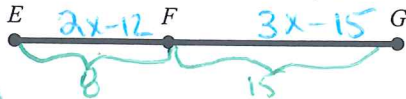

a. Y b. Z c. W d. X

B 5. What is the length of $\overline{AD}$?

$8 - (-7) = 8 + 7 = 15$

a. 17   b. 15   c. 7   d. 1

A 6. If $EF = 2x - 12$, $FG = 3x - 15$, and $EG = 23$, find the values of x, EF, and FG. The drawing is not to scale.

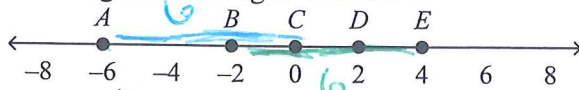E $2x-12$ F $3x-15$ G

$(2x-12) + (3x-15) = 23$ $5x = 50$
$5x - 27 = 23$ $x = 10$

a. $x = 10$, $EF = 8$, $FG = 15$ b. $x = 3$, $EF = -6$, $FG = -6$ c. $x = 10$, $EF = 32$, $FG = 45$ d. $x = 3$, $EF = 8$, $FG = 15$
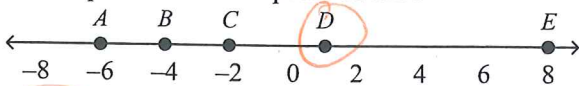
B 7. What segment is congruent to $\overline{AC}$?

a. $\overline{BD}$ b. $\overline{BE}$ c. $\overline{CE}$ d. none

$\dfrac{8 + (-6)}{2} = \dfrac{8+6}{2} = \dfrac{2}{2} = 1$
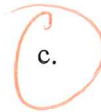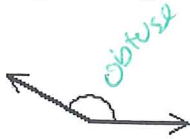
A 8. Which point is the midpoint of $\overline{AE}$?

a. D b. B c. not B, C, or D d. C

C   9. Which angle is a right angle?

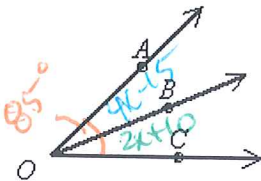a.   b.   c.

obtuse   *acute*

d.

180°

B   10. If $m\angle AOC = 85°$, $m\angle BOC = 2x + 10$, and $m\angle AOB = 4x - 15$, find the degree measure of $\angle BOC$ and $\angle AOB$. The diagram is not to scale.

$$(4x) - 15 + (2x) + 10 = 85$$
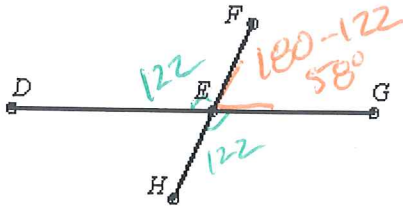$$6x - 5 = 85$$
$$6x = 90$$
$$x = 15$$

$$4(15) - 15 =$$
$$60 - 15 = 45$$
$$\angle AOC = 45°$$

$$2(15) + 10 \quad \angle BOC = 40$$
$$30 + 10$$
$$40$$

a. $m\angle BOC = 30°$; $m\angle AOB = 55°$ b. $m\angle BOC = 40°$; $m\angle AOB = 45°$ c. $m\angle BOC = 45°$; $m\angle AOB = 40°$
d. $m\angle BOC = 55°$; $m\angle AOB = 30°$

_____ 11. If $m\angle DEF = 122$, then what are $m\angle FEG$ and $m\angle HEG$? The diagram is not to scale.

122   *180 - 122*   *58°*   *122*

a. $m\angle FEG = 122$, $m\angle HEG = 58$ b. $m\angle FEG = 58$, $m\angle HEG = 132$ c. $m\angle FEG = 68$, $m\angle HEG = 122$
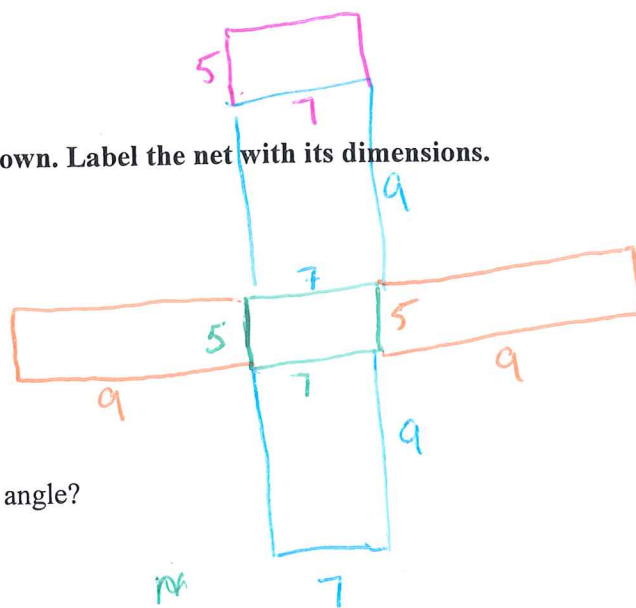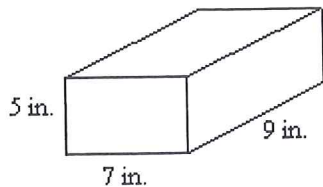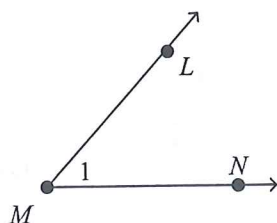d. $m\angle FEG = 58$, $m\angle HEG = 122$

Name: _____

Short Answer

Draw a net for the figure shown. Label the net with its dimensions.

12.

5 in.
9 in.
7 in.

13. What are three names for the angle?

∠1
∠LMN
∠NML