1.) How many points can two distinct lines intersect?
A. 1
B. 2
C. 3
D. Infinitely

## Using the diagram below, answer questions 2-3.


2.) Which point is not coplanar with points $A, D$ and $B$ on the plane shown?
A. $F$
B. $C$
C. $E$
3.) Points $A, B, E$, and $F$
A. are collinear
B. are coplanar
C. are noncoplanar
D. none of the above
4.) What is the coordinates of the image of $\mathrm{P}(4,12)$ after a reflection over the y -axis?
A. $P^{\prime}(4,-12)$
B. $P^{\prime}(-4,-12)$
C. $P^{\prime}(-4,12)$
D. $P^{\prime}(4,12)$
5.) In this picture, which group of points are noncoplanar?

A. $D, A, F, E$
B. $F, G, B, A$
C. $E, F, G, H$
D. $G, B, F, D$
6.) Using symbols, write "the line NM"
A. $\overrightarrow{N M}$
B. $\overline{N M}$
C. $\overleftrightarrow{N M}$
D. $\overleftarrow{N M}$
7.) Which of the following could be used to represent a plane?
A. a satellite dish
B. a pane of glass
C. the tip of a pin
D. a can of soda
8.)Find the distance between points
$\mathrm{K}(8,6)$ and $\mathrm{V}(4,3)$.
A. 5
B. 21
C. 3
D. 50
9.) If point P lies between M and N , then which of the following is true?

A. M lies on $\overline{P N}$
B. N lies on $\overline{P M}$
C. P lies on $\overline{M N}$
D. $\overline{M N}+\overline{M N}=\overline{M P}$
10.) What is the measure of $\overline{Y X}$ if $X$ is between $Y$ and $Z, \mathrm{YZ}=18$ and $\mathrm{XZ}=2$ ?
A. 20
B 16
C. 9
D. 12
11.) Find the coordinates of the midpoint of $M(8,8)$ and $N(-4,2)$
A. $(-8,2)$
B. $(2,5)$
C. $(5,2)$
D. $(3,5)$
12.) Using the figure below, find the distance of $B D$.

A. 5
B. 6
C. 7
D. 8
13.) Find the measure of $\overline{K L}$ if K is between J and $\mathrm{L}, \mathrm{JK}=5 \mathrm{x}-3$, $\mathrm{KL}=7 \mathrm{x}+8$, and $\mathrm{JL}=65$.
A. 22
B. 65
C. 50
D. 43
14.) Solve the following problem:
$F H=56$. Find the value of $x$.

A. 5
B. 65
C. 50
D. 12
15.) In the figure below, $M$ is the midpoint of $L N$. Find the value of $L M$.

A. $L N=2$
B. $L N=6$
C. $L N=12$
D. $L N=24$
16.) Given the diagram below, which of the following statements is NOT true?

A. PR and SQ intersect at point T
B. PT and TQ are both rays
C. ST and PR are both segments
D. PT and QT are opposite rays
17.) The symbol $\perp$ indicates that two lines are $\qquad$ _.
A. Parallel
B. Perpendicular
C. Intersecting
D. None of the above
18.) Which of the following can be used to measure an angle?
A. Protractor
B. Compass
C. Ruler
D. Calculator
19.) Classify the given angle.

A. Right angle
B. Obtuse angle
C. Acute angle
D. Straight angle .
20.) $A(n)$ $\qquad$ angle measures greater than 90 degrees
A. obtuse
B. right
C. acute
D. straight
21.) The $\qquad$ of a segment divides the segment into two congruent segments.
A. midpoint
B. bipoint
C. ray
D. endpoint
22.) Classify the given angle.

| M | $\mathrm{P} \quad \mathrm{N}$ |
| :--- | :--- | :--- |

A. Right angle
B. Obtuse angle
C. Acute angle
D. Straight angle
23.) What is the measure of $\angle B A C$ ?

A. 10
B. 25
C. 130
D. 155
24.) What is another name for $<4$ ?

A. $\angle S V T$
B. $\angle S W V$
C. $<S V W$
D. $<V S T$
25.) $m \angle A B C=135$ and $m \angle R S T=135$. What is true about these two angles?
A. They are both acute angles.
B. They are both right angles
C. They are congruent.
D. They are both straight angles.
26.) Angles that share a side are called
A. vertical
B. supplementary
C. adjacent
D. complementary
27.) The symbol || indicates that two lines
A. are parallel
B. are perpendicular
C. intersect
D. none of the above
28.) When $\qquad$ lines intersect, they form four 90 degree angles
A. parallel
B. perpendicular
C. skew
D. right

Using the diagram below, answer questions

29.) What are the sides of $\angle 5$ ?
A. $\overrightarrow{W B}$ and $\overrightarrow{W F}$
B. $\overline{W B}$ and $\overline{W G}$
C. $\overrightarrow{W F}$ and $\overrightarrow{W G}$
D. $\overline{W B}$ and $\overline{F W}$
30.) $\angle 3$ and $\angle 4$ are...
A. adjacent
B. linear pair
C. Supplementary
D. all of these
31.) $\angle 1$ and $\angle 5$ are...
A. adjacent
B. linear pair
C. Supplementary
D. none of these
32.) $\angle 1$ and $\angle 2$ are...
A. adjacent
B. vertical
C. Complementary
D. a linear pair
33.) Angles that are $\qquad$ sum to 90 degrees.
A. vertical
B. complementary
C. linear
D. supplementary
34.) If $m<1=8 x+2$ and $m<2=6 x+20$, find the $\mathrm{m}<2$.

A. 68
B. 74
C. 136
D. 86
35.) Angles that are $\qquad$ sum to 180 degrees.
A. vertical
B. complementary
C. adjacent
D. supplementary
36.) If two complementary angles have measures of $4 \mathrm{x}+14$ and $3 \mathrm{x}-22$, find the measure of $x$.
A. $x=14$
B. $x=20$
C. $x=56$
D. $x=90$
37.) $A(n)$ $\qquad$ divides an angle into two congruent angles.
A. angle bisector
B. midpoint
C. ray
D. segment bisector
38.) Linear angles are always supplementary.
A. True
B. False
39.) Which figure below shows a pair of supplementary angles that are not adjacent?
A.

B.

C.

D.

40.) If $\mathrm{m}<\mathrm{ABC}=125$ and $\mathrm{m}<2=40$, then find $\mathrm{m}<1$.
B. 55
C. 75
D. 85

41.) Which of the following is NOT an isometry?
A. Rotation
B. Dilation
C. Reflection
D. Translation
42.) Which of the following is an example of a rotation?
A. swinging a bat
B. inflating a balloon
C. erasing a board
D. looking in a mirror
43.) Which of the following coordinates represent the image of ABC after a reflection over the $x$-axis? The points are $\mathrm{A}(5,2), \mathrm{B}(-1,-1)$, and $C(-3,2)$.
A. $(5,-2)(-1,1)(-3,-2)$
B. $(-5,-2)(1,1)(3,-2)$
C. $(-5,2)(1,-1)(3,2)$
D. $(-2,5)(1,-1)(3,-2)$

## Use the figure below for problems 44-46.


44.) Which line segment is parallel to $G E$ ?
A. $D H$
B. $F G$
C. $K I$
D. HI
45.) Which two line segments are not parallel?
A. $D F$ and $G E$
B. $H D$ and $E I$
C. $J H$ and $I K$
D. $D E$ and $F J$
46.) Which of the following are parallel planes?
A. GED and KIH
B. DFG and GJK
C. EGK and HIJ
D. None of the above
47.) $\qquad$ lines are lines that do not intersect and are on the same plane.
A. parallel
B. perpendicular
C. skew
D. right
48.) $\qquad$ angles are directly across from each other, formed by intersecting lines, and are congruent.
A. linear
B. intersecting
C. vertical
D. supplementary
49.) Using the figure below, find $\mathrm{m} \angle 1$.

A. 25
B. 165
C. 145
D. 15
50.) Refer to the figure below.

If $\mathrm{m} \angle 1=7 \mathrm{x}-5$ and $\mathrm{m} \angle 2=5 \mathrm{x}+27$, what is the value of $x$ ?

A. 16
B. 32
C. 107
D. 43
51.) Find the value of $x$.

A. 23
B. 24
C. 25
D. 26
52.) Angles that sum to 90 degrees are considered to be $\qquad$ .
A. Supplementary
B. Complementary
C. Linear
D. Adjacent
53.) If an angle has a measure of 47 degrees, what is the measure of its complement?
A. 40
B. 43
C. 85
D. 92
54.) In the figure, which angles form a pair of vertical angles?

A. $<1$ and $<2$
B. $<1$ and $<4$
C. $<2$ and $<3$
D. $<2$ and $<4$

## Use the figure below to answer questions 55-61.


55.) Identify the special angle pair name for $\angle 1$ and $\angle 5$.
A. same-side interior
B. corresponding
C. vertical
D. alternate interior
56.) Name a pair of alternate interior angles in the figure.
A. $<1$ and $<6$
B. $<1$ and $<3$
C. $<2$ and $<8$
D. $<4$ and $<5$
57.) Name a pair of same-side interior angles.
A. $<1$ and $<5$
B. $<3$ and $<5$
C. $<3$ and $<6$
D. $<2$ and $<8$
58.) In the figure, $<2$ and $<7$ are called
$\qquad$ angles
A. alternate interior
B. alternate exterior
C. supplementary
D. corresponding
59.) Given $\mathrm{t}|\mid u, \mathrm{~m} \angle 4=63$, find $\mathrm{m} \angle 8$.
A. 27
B. 63
C. 105
D. 117
60.) Given $l|\mid m, \mathrm{~m} \angle 1=2 \mathrm{x}-3$ and $\mathrm{m} \angle 8=71$. Find the value of $x$.
A. 28
B. 37
C. 71
D. 98
61.) Given $\mathrm{m} \angle 3=3 \mathrm{x}-10$ and $\mathrm{m} \angle 5=70$. Find the value of $x$ so that $l \| m$.
A. 40
B. 70
C. 68
D. 24
62.) The measures of two angles of a triangle are 52 and 89 . What is the measure of the third angle?
A. 29
B. 39
C. 128
D. 141
63.) Find the measure of $e$.

A. 60
B. 69
C. 51
D. 129
64.) Which of the following could be the lengths of a triangle?
A. $11,15,27$
B. $13,14,32$
C. $16,19,34$
D. $33,22,55$
65.) A triangle with two congruent sides is considered to be a(n) $\qquad$ _.
A. Equilateral triangle
B. Scalene triangle
C. Isosceles triangle
D. Right triangle
66.) In $\triangle \mathrm{QXR}$, what side is opposite $\angle \mathrm{R}$ ?
A. $\overline{Q R}$
B. $\overline{Q X}$
C. $\overline{X R}$
D. $\angle \mathrm{Q}$
67.) If $\boldsymbol{\triangle} P Q R \cong \mathbf{D E F}$, then $\overline{R P}$ is congruent to...
A. $\overline{P Q}$
B. $\overline{D E}$
C. $\overline{F D}$
D. $\overline{E F}$
68.) Given $\triangle \mathrm{ABC} \cong \mathbf{\triangle} \mathrm{XYZ}, \mathrm{AB}=38$, and $X Y=5 x+8$. Find the value of x .
A. 30
B. 20
C. 6
D. 4
69.) A triangle with no sides congruent is considered to be a(n) $\qquad$ _.
A. Isosceles triangle
B. Scalene triangle
C. Equilateral triangle
D. Right triangle
70.) Name one additional pair of corresponding parts that need to be congruent in order to prove that $\mathbf{\Delta}$ FIG $\cong \mathbf{\Delta}$ TOM by SAS.

A. $\overline{F G} \cong \overline{M T}$
B. $\angle \mathrm{F} \cong \angle \mathrm{T}$
C. $\overline{I G} \cong \overline{O M}$
D. $\overline{F I} \cong \overline{O T}$
77.) The set of all points is known as
71.) If $\mathbf{\Delta} \mathrm{JKL} \cong \mathbf{\Delta} \mathrm{NOM}$, then...
A. $\overline{J K} \cong \overline{O M}$
B. $\overline{J K} \cong \overline{K L}$
C. $\overline{K L} \cong \overline{N M}$
D. $\overline{L J} \cong \overline{M N}$
72.) A triangular table has angles measuring $62^{\circ}$ and $56^{\circ}$. What is the measure of the third angle?
A. 124
B. 118
C. 62
D. 56
73.) In the diagram below, what is the measure of x ?

A. 70
B. 60
C. 50
D. 40
74.) Find the value of $x$.

A. 74
B. 148
C. 32
D. 37
75.) Determine the length of the line segment joining the points $\mathrm{A}(-14,2)$ and $\mathrm{B}(-2,2)$.
a) -16
b) 12
c) -12
d) 16
76.) The three undefined terms of geometry are:
c) Ray, segment, point
d) Line, ray, segment
e) Line, plane, point
f) Line, plane, ray
$\qquad$ _.
g) Plane
b) Space
h) Line
d) Coplanar
78.) Name the coordinate of the midpoint of $\overline{\mathrm{NH}}$.

i) K
b) L
j) J
d) H

For 79 and 80 , If $B$ is between $A$ and $C$, find " $x$ ".
79.) $A B=x+2 ; B C=2 x-6 ; A C=20$
b) 8
d) 2
k) 28
l) -12
80.) $A B=24 ; B C=3 x ; A C=7 x-4$.
b) 7
d) 2
m) 8
n) $(3,-3.5)$
81.) In the figure, $\overrightarrow{Q S}$ bisects $\angle P Q R$, if ${ }^{*}=6 x+18$ and $m \angle 2=9 x$, find $m \angle P Q R$.
o) 88
p) 105
q) 108
r) 110

82.) In the figure, $\angle 1$ and $\angle 2$ are vertical angles. If $m \angle 1=8 x+2$ and $m \angle 2=6 x+20$, then find $m \angle 2$.
s) 68
t) 74
u) 77
v) 136
83.) What is the distance between the points $M(6,-16)$ and $Z(-1,14)$ to the nearest tenth?
b) 21.2 units
d) 30.4 units
w) 5.4 units
x) 30.8 units

## Geometry CP Midterm Review

84.) $\overline{S T}$ bisects $\angle R S U, m \angle 1=4 x-12, m \angle 2=2 x+6$. What is the measure of $\angle R S U$ ?

a) 18
b) 9
c) 48
d) 1
85.) $m \angle A B C=7 x-2$; $m \angle C B D=6 x+13$. Find x.

a) 89
b) 13
c) 15
d) 169
86.) $m \angle 1=4 x+23, m \angle 2=2 x+1$. Find $m \angle 2$.

a) 23
b) 90
c) 67
d) 19
87.) What is the equation of a line perpendicular to $y=-4 x+3$ ?
A. $y=-4 x+4$
B. $y=-4 x+(1 / 3)$
C. $y=(1 / 4) x+5$
D. $y=(-1 / 4) x-3$
88.) Determine if AB and CD are parallel, perpendicular, or neither.
$A(4,2) B(3,9) \quad C(3,6) D(-4,5)$
a) Parallel
b) Perpendicular
c) Neither
89.) Triangle $A B C$ is equilateral. $A B=4 x+3$ and $B C=$ $2 x+9$. Find the length of $A C$
A. 12
B. 15
C. 18
D. 21
90.) If $\boldsymbol{\Delta} \mathrm{MON} \cong \boldsymbol{\Delta}$ PQR with $\mathrm{MO}=20, \mathrm{MN}=32$, and $P R=3 x-10$, what is the value of " $x$ "?
A. 5
B. 9
C. 14
D. 10
91.) Quadrilateral $A B C D \rightarrow$ Quadrilateral $W X Y Z$.

Find the preimage of $<X Y Z$.
a) $\angle A B C$
c) < DCB
b) $<B C D$
d) $<Z Y X$
92.) Determine the new points of $A(-3,2)$ if:
$(x, y)-->(x+7, y-4)$
a.) $(4,-2)$
b.) $(-2,4)$
c.) $(-10,-6)$
d.) $(-4,-6)$
93.) Identify the translation given mapping

$$
(-2,7) \text {--> }(3,3)
$$

a) $(x, y) \rightarrow(x+5, y-4)$
b) $(\mathrm{x}, \mathrm{y}) \rightarrow(\mathrm{x}+1, \mathrm{y}-4)$
c) $(x, y) \rightarrow(x-5, y+4)$
d) $(\mathrm{x}, \mathrm{y}) \rightarrow(\mathrm{x}-1, \mathrm{y}+4)$

