$\qquad$ Pd $\qquad$

## 1.1-1.4 Quiz Review

TRUE or FALSE: write out the entire word in the blank provided.
$\qquad$ 1. Plane $P$ contains $\overleftrightarrow{\mathrm{DC}}$.
$\qquad$ 2. Plane $P$ contains X.

$\qquad$ 4. A, B, C and D are coplanar.
$\qquad$ 5. D and $B$ are collinear.
$\qquad$ 6. A, B, and X are collinear.

$\qquad$ 7. $\mathrm{X}, \mathrm{A}, \mathrm{B}$, and C are coplanar.
$\qquad$ 8. Every plane which contains A and B must contain C.
9. Line j intersects $\stackrel{\leftrightarrow}{\mathrm{DC}}$.
10. The plane ABX intersects plane $P$ at $\overleftrightarrow{A C}$.
$\qquad$ 11. X is between A and C .
$\qquad$ 12. D, B, and X are coplanar.
$\leftrightarrow$
$\qquad$ 13. AB and $X$ are coplanar.
$\qquad$ 14. Space is the set of all points.
$\qquad$ 15. If three points are collinear, then they lie in exactly one plane.
$\qquad$ 16. If three points are collinear, then they are coplanar.
$\qquad$ 17. If two planes intersect, then their intersection is a line.
18. Name three collinear points. $\qquad$ , \&
19. Name four coplanar points. $\qquad$ , $\qquad$ \& $\qquad$
20. Name four non-coplanar points. $\qquad$ , $\qquad$ , $\qquad$ \& $\qquad$
21. Name two collinear points that are not on a plane shown in the diagram. $\qquad$ \& $\qquad$
22. Name three coplanar points that are not on a plane shown in the diagram. $\qquad$ , ___ $\qquad$

23. $P S=3 x+2, S Q=4 x-5, P Q=39$. Is $S$ the midpoint of $\overline{P Q}$ ? Justify your answer.
24. Suppose $B$ is between $A$ and $C$. If $B C=73.2$ and $A B=39.9$, what is $A C$ ?
25. State the "betweeness" relationship if $Q P=42.7, Q R=79.9$, and $R P=37.2$.
26. $A, B$, and $C$ are collinear points with coordinates $a, b, c$ respectively.
a. If $b=-10, c=4$ and $B A=287$, find $B C$ and $C A$, give 2 possible answers.
b. $C$ is between $A$ and $B . A C=B C, C B=10$, and $C=14$. Give 2 possible coordinates for $A$.
27. Suppose $Q$ is the midpoint of $P R . P Q=3 x-5$ and $Q R=x+17$. Find the value of $x$. What length should $P S$ have if $R$ is to be the midpoint of $\overline{Q S}$ ?
28. $A B=3 x-4, A C=40$ and $A B=B C$ Find $x$.
29. $M$ is the midpoint of $\overline{A B}$. If $A M=2 x^{2}+16, A B=6 x^{2}$, find $A B$. (do not forget the $\pm$ )
30. Find the value of $x$ and $y$ that makes $A B$ and $C D$ bisect each other.

31. If A is $(-3,5)$ and M is $(7,-12)$ then find B if M is the midpoint of B .
32. Find the perimeter of a triangle with coordinates $(5,6)(8,-4)$ and $(12,10)$ (leave your answer exact and simplified).
33. Explain in words the difference between distance formulas on a number line and a coordinate plane.
34. Find the area for the triangle given in number 32 above.

