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## Geometry Chapter 1 Review

Use the diagram to decide whether the statement is true or false.


1. Point $A$ lies on line $m$.
2. Point $D$ lies on line $n$.
3. Points $B, C, E$, and $Q$ are coplanar.
4. Points $C, E$, and $B$ are collinear.
5. Another name for plane $G$ is plane $Q E C$.

## Find the indicated length.

6. Find $H J$.

7. Find $B C$.

8. Find $X Z$.


Find the distance between the two points. Round to the nearest tenth.
9. $\quad T(3,4)$ and $W(2,7)$
10. $C(5,10)$ and $D(6,21)$
11. $M(28,0)$ and $N(21,3)$

Find the midpoint between the two points.
12. $T(3,4)$ and $W(2,7)$
13. $C(5,10)$ and $D(6,21)$
14. $M(28,0)$ and $N(21,3)$
15. Line $t$ bisects $\overline{C D}$ at point $M, C M=3 x$, and $M D=27$.

Find $C D$.
Use the diagram to answer the follow questions.

16. Classify $\angle G H J$ as acute, obtuse, right, or straight.
17. If $\overrightarrow{H L}$ is an angle bisector of $\angle K H J$, find the value of $x$.

Classify each angle pair as linear pair, vertical angles, or neither.

18. $\angle 1$ and $\angle 3$
19. $\angle 2$ and $\angle 3$
20. The measure of an angle is $64^{\circ}$. What is the measure of its complement? What is the measure of its supplement?
21. A convex polygon has half as many sides as a concave 10 -gon. Draw the concave polygon and the convex polygon. Classify the convex polygon by the number of sides it has.
22. Find the area of $\triangle A B C$ if $A(1,4), B(3,-1)$, and $C(-2,-1)$

Name: $\qquad$
Answers

1. True
2. False
3. False
4. False
5. False
6. 22
7. 11
8. 71
9. 3.2
10. 11.0
11. 7.6
12. $\left(\frac{5}{2}, \frac{11}{2}\right)$
13. $\left(\frac{11}{2}, \frac{31}{2}\right)$
14. $\left(\frac{49}{2}, \frac{3}{2}\right)$
15. 54
16. Obtuse
17. 2
18. Vertical angles
19. Linear pair
20. $26^{\circ}, 116^{\circ}$
21. Pentagon

22. 12.5 units $^{2}$
