## Geometry Final Review

## CHAPTER 1

1. Name 3 collinear points $\qquad$
$\qquad$
$\qquad$

2. Find $A B$

3. Find the distance between $F(5,-6), N(-5,6)$
4. Find the coordinates of the midpoint of a segment with the given endpoints
$C(-7,-4)$ and $B(3,5)$ $\qquad$

## Chapter 9

5. Given $A(2,-4)$, what would $A^{\prime}$ be under a reflection in the line $y=x$ ?
6. Name the image of $\overline{A C}$ under reflection in line $l$

7. What is the image of $A(2,1)$ under the translation $\langle 3,-1\rangle$


Name $\qquad$
Date $\qquad$
8. Is the dilation a reduction or an enlargement? What is the scale factor?

9. What is the vector that describes the translation?


## Chapter 3

10. Find the measure of each angle if $<2$ and $<3$ are complementary. $<1 \cong<4$ and $m<2=28$


$$
\begin{gathered}
m<1 \\
m<3 \\
m<4
\end{gathered}
$$

11. Identify each pair of angles as alternate interior, alternate exterior, corresponding or consecutive interior.

$$
\begin{aligned}
& <6 \text { and }<3 \\
& <1 \text { and }<5 \\
& <4 \text { and }<6 \\
& <2 \text { and }<7
\end{aligned}
$$

$\qquad$
$\qquad$

12. In the drawing above, given $a / / b$, if $m<6=85^{\circ}$ find $m<3$
13. Determine the slope of the line containing the points $C(7,-3)$ and $D(-8,-3)$.
14. Write an equation in slope-intercept form of the line with slope of $m=3$ and $y$-intercept of -5

## Chapter 4

15. Find x and the length of each side if $\triangle A B C$ is an isosceles triangle with $\overline{A B} \cong \overline{B C}$

16. Find measure of each numbered angle

$m<1$ $\qquad$
$m<2$ $\qquad$
$m<3$ $\qquad$
17. Write the similarity statement for the congruent triangles in the figure

$\qquad$

Chapter 6
18. Find the sum of the measures of the interior angles of a 25 -gon.
19. Find the sum of the measures of the exterior angles of a convex 15 -gon. $\qquad$
20. List the characteristics of a parallelogram.
21. Find $x$ and $y$ so that the quadrilateral is a parallelogram.

$x$
$\qquad$
$y$ $\qquad$
22. $\overline{Y Z}$ is the median of trapezoid $T R W V$. Determine the value of $x$


## Chapter 5



## Use this figure for \#'s 23-25.

23. If $\overline{R Q}$ is a median then $\overline{S Q} \cong$ $\qquad$
24. If $\overline{R Q}$ is an angle bisector, then $<S R Q \cong$ $\qquad$
25. If $\overline{R Q}$ is an altitude, then $m<R Q S=$ $\qquad$
26. What is the longest side of $\triangle L M P$ ? $\qquad$


## Chapter 7

27. There are 15 plums and 9 apples in a bowl. What is the ratio of apples to plums? $\qquad$
28. If the two triangles are similar, find the value of $x$.

29. The pair of polygons is similar. Find x. $\qquad$

30. Find x

31. A rectangle has a perimeter of 56 yards. A similar rectangle has a perimeter of 84 yards. If the length of the larger rectangle is 30 inches, what is the length of the smaller rectangle? Round to the nearest tenth if necessary.

## Chapter 8

32. Find $x, y$ and $z$

33. Find $x$

34. Find x

35. Find $x$ and $y$

36. Solve the right triangle. Round side measures to the nearest tenth and angle measures to the nearest degree


$$
m<G
$$

$\qquad$

$$
m<F_{1}
$$

$\qquad$
HF $\qquad$

## Chapter 11

37. Find the area of the parallelogram. Round to the nearest tenth.

38. Find $x$ if the area of the parallelogram is $780 \mathrm{~cm}^{2}$.

39. Find the area of the trapezoid. Round to the nearest tenth. $\qquad$

40. Find the area of the figure. Round to the nearest tenth. $\qquad$

41. These rectangles are similar. Find the area of the one on the right. Round to the nearest tenth, if necessary.


## Chapter 12

42. Find the lateral area of the square pyramid.

$\qquad$
43. Find the surface area and the volume of the rectangular prism $\qquad$

44. Find the surface area and volume of the cone
$\qquad$

45. Find the surface area and volume of the cylinder

SA

46. The diameter of a sphere is 32 mm . Find the surface area and volume.


