$\qquad$
Name:
Vocabulary: Supplementary, complementary, vertical, same side interior, same side exterior,
alternate interior, alternate exterior, corresponding, triangle, quadrilateral, and parallelogram.

|  | 1) Name the angles listed and the special property. <br> $\angle 1$ and $\angle 5$ $\qquad$ <br> $\angle 4$ and $\angle 6$ $\qquad$ <br> $\angle 2$ and $\angle 8$ $\qquad$ <br> $\angle 4$ and $\angle 5$ $\qquad$ | 2) Given $m \\| n$ and $m \angle 8$, find the measures of all the numbered angles in the figure. <br> $\mathrm{m} \angle 1=$ $\qquad$ $\mathrm{m} \angle 2=$ $\qquad$ <br> $\mathrm{m} \angle 3=$ $\qquad$ $\mathrm{m} \angle 4=$ $\qquad$ <br> $\mathrm{m} \angle 5=$ $\qquad$ $\mathrm{m} \angle 6=$ $\qquad$ <br> $\mathrm{m} \angle 7=$ $\qquad$ $\mathrm{m} \angle 8=112$ |
| :---: | :---: | :---: |
| 3) Solve for $x$. | 4) Solve for $x$. | 5) Solve for $x$. |
| 6) solve for $x$. | 7) Solve for $x$. | 8) Solve for $x$ and $m \angle J$ |
| 9. Solve for $x$. | 10) Find $x$ and $y$. | 11) Find $x$ and $y$. |

1) Peach Street and Cherry Street are parallel. Apple Street intersects them, as shown in the diagram below. If $m \angle 1=2 x+36$ and $m \angle 2=7 x-9$, what is $m \angle 1$ ?

Answers

1) $\qquad$
A. 9
B. 17
C. 54
D. 70

2) What is the measure of $\angle B$ in the figure below?
A. 62
B. 58
C. 59
D. 56

3) In this figure, I// $m$. Jessie listed the first two steps in a proof that $\angle 1+\angle 2+\angle 3=180^{\circ}$. Which justification can Jessie give for step 1 and 2?
A. Alternate interior angles are congruent.
B. Corresponding anlges are congruent.
C. Vertical angles are congruent.
D. Alternate exterior angles are congruent.


|  | Step | Justification |
| :---: | :---: | :---: |
| 1 | $\angle 2 \cong \angle 4$ | $?$ |
| 2 | $\angle 3 \cong \angle 5$ | $?$ |

4) In the diagram below of parallelogram STUV, $S V=x+3, V U=2 x-1$, and $T U=4 x-3$. What is the length of $\overline{S V}$ ?
5) $\qquad$
6) $\qquad$
7) $\qquad$
8) In parallelogram $A B C D$, find $m \angle A$.
A. $15^{\circ}$
B. $70^{\circ}$
C. $110^{\circ}$
D. $200^{\circ}$

9) $\qquad$
10) $\qquad$

A) diagonals of a parallelogram bisect each other
B) opposite sides of a parallelogram are congruent
C) opposite angles of a parallelogram are congruent
D) consecutive angles of a parallelogram are supplementary
11) Find $x$ and $y$ in the diagram.

A) $x=60, y=30$
B) $x=45, y=60$
C) $x=30, y=60$
D) $x=60, y=120$
12) List the angles of the triangle in order from SMALLEST to LARGEST.

13) $\qquad$
