$\qquad$
1.

In $\triangle M N O$, the points $C, D$, and $E$ are midpoints. $C D=4 \mathrm{~cm}$, $C E=8 \mathrm{~cm}$, and $D E=7 \mathrm{~cm}$.
a. Find $M O$.
b. Find $N O$.
c. Find $M N$.

2.

In quadrilateral $W V U T$, the points $F, E, D$, and $C$ are midpoints. $W U=45 \mathrm{in}$. and $T V=31 \mathrm{in}$.
a. Find $C D$.
b. Find $C F$.
c. Find $E D$.

3.
$\overline{Q R}$ is a midsegment of $\triangle L M N$. $Q R=9$. Find $N M$.

4. Find the value of the variable:
a.

b.

c.

5. Find the perimeter of $\Delta G H I$

6. Why is $\angle Y P Q \cong \angle P X R$ ? Justify your reasoning.

7. List the sides in order of size, largest to smallest.
a.

b.

c.

8. List the angles in order of size, largest to smallest.
a.

b.

c.

9. Circle the sets of numbers that can be the sides of a triangle.
a.
b.
$4,7,8$
$6,10,17$
c.
4, 4, 4
d.
1, 9, 9
e.
$11,12,13$
f.
18, 20, 40
10. Two sides of a triangle are given. Determine all possible lengths of the third side.
a.
4 and 7
b.
c.
9 and 17
11 and 20

