Name: $\qquad$

## Unit 4 - Geometry

## 4.7-Review II

1. Classify each of the following as acute, right, obtuse, straight or reflex angles.
a)

b)

c)

d)

e)

f)

2. Fill in the missing parts in the table.

| Angle | Complement | Supplement | Resulting angle after <br> original angle bisected |
| :---: | :---: | :---: | :---: |
|  | $71^{\circ}$ |  |  |
| $143^{\circ}$ |  |  |  |
|  |  |  | $56^{\circ}$ |
|  |  | $102^{\circ}$ |  |

3. Determine the measures of the indicated angles.
a)

$\qquad$
$\angle 2=$ $\qquad$

$\angle 1=$ $\qquad$
$\angle 3=$ $\qquad$
$\angle 3=$ $\qquad$
$\angle 4=$ $\qquad$
4. Name the relationship between the indicated pairs of angles. Use the following key to answer each of the questions:

A - alternate interior

B - corresponding

C - interior on the same side of the transversal

D - alternate exterior

E - exterior on the same side of the transversal

F - vertically opposite

a) $\angle 4$ and $\angle 8$
b) $\angle 4$ and $\angle 6$
c) $\angle 1$ and $\angle 8$
d) $\angle 3$ and $\angle 7$
e) $\angle 3$ and $\angle 6$
f) $\angle 2$ and $\angle 7$
g) $\angle 3$ and $\angle 5$
h) $\angle 1$ and $\angle 5$
i) $\angle 2$ and $\angle 8$
j) $\angle 6$ and $\angle 8$
k) $\angle 4$ and $\angle 5$
I) $\angle 2$ and $\angle 6$
5. Indicate which of the following pairs of angles are either congruent (equal) or supplementary.

d) $\angle 1$ and $\angle 3$
e) $\angle 3$ and $\angle 7$
f) $\angle 1$ and $\angle 5$
a) $\angle 1$ and $\angle 6$
b) $\angle 2$ and $\angle 8$
c) $\angle 5$ and $\angle 7$
g) $\angle 3$ and $\angle 6$
h) $\angle 2$ and $\angle 7$
i) $\angle 4$ and $\angle 6$
6. What is the true bearing from $A$ to $B$ ?
a)

b)

c)

7. What is the true bearing of the following directions?
a) E
b) NW
c) NNE
8. A. Bisect the following angles using a protractor. What is the measure of the bisected angle?
a)

b)

c)

B. Bisect the following angles using a compass.
a)

b)

c)

9. The lengths of the sides of a quadrilateral are $4^{\prime \prime}, 8^{\prime \prime}, 12^{\prime \prime}$ and $16^{\prime \prime}$. Calculate the lengths of the sides of a similar quadrilateral if its longest side is $3^{\prime}$. (answer to the nearest hundredth)
10. If $\triangle F L D \sim \triangle M X Q$, determine which sides and angles correspond to the following.
a) $M Q=$
b) $\angle L=$
c) $F L=$
d) $\angle Q=$
e) $Q X=$
f) $\angle M=$
11. Given that the two figures shown are similar, determine the values of $x$ and $y$.

12. Reduce the following shape by a scale factor of $\frac{3}{4}$ using the ratio method.

13. Enlarge the following shape by a scale factor of 1.5 using the parallel method.


