Review – Unit 4

1. Name the relationship between the indicated pairs of angles. Use the following key to answer each of the questions:

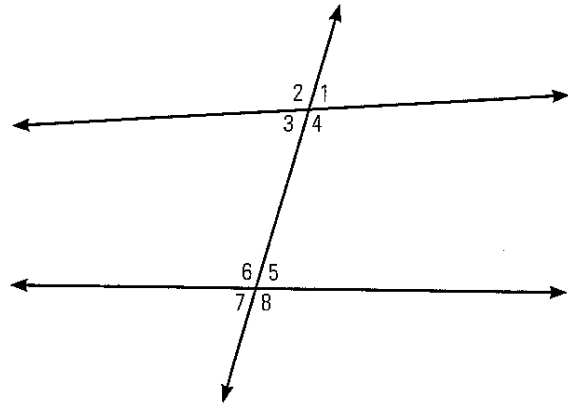   A – alternate interior

   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

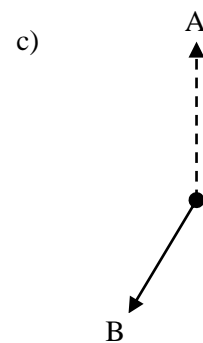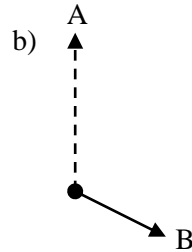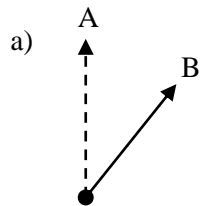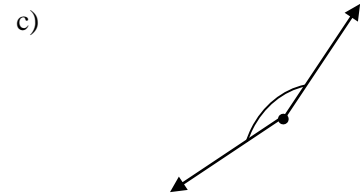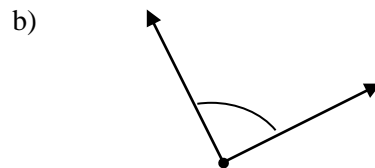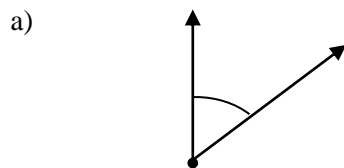|		
a) $\angle 4$ and $\angle 6$	e) $\angle 1$ and $\angle 8$	i) $\angle 4$ and $\angle 8$
b) $\angle 2$ and $\angle 8$	f) $\angle 4$ and $\angle 5$	j) $\angle 2$ and $\angle 7$
c) $\angle 3$ and $\angle 6$	g) $\angle 2$ and $\angle 6$	k) $\angle 3$ and $\angle 5$
d) $\angle 1$ and $\angle 5$	h) $\angle 6$ and $\angle 8$	l) $\angle 3$ and $\angle 7$

2. Use a protractor to find the true bearing from A to B?

   a)

   b)

   c)

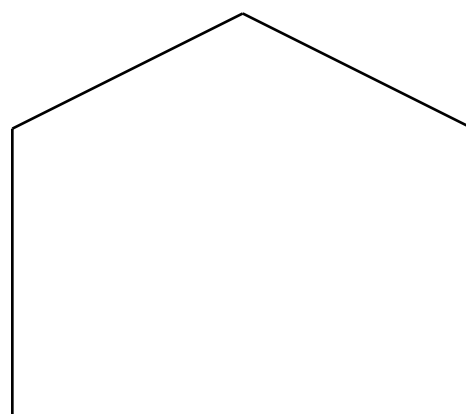3. Bisect the following angles using a **compass**.

   a)

   b)
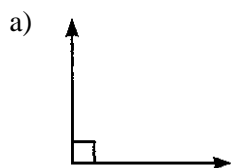
   c)

4. Fill in the missing parts in the table.

Angle	Complement	Supplement	Resulting angle after original angle bisected
18º			
		152º	
	44º		
			31º

5. Reduce the following shape by a scale factor of $\frac{1}{2}$ using the *ratio method*.
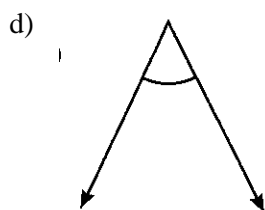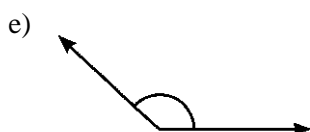
6. Name each of the following as **acute, right, obtuse, straight** or **reflex** angles.
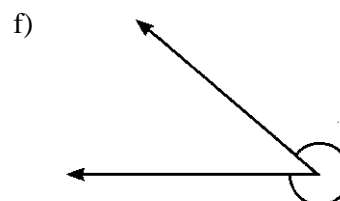
a)

_____

b)

_____

c)

_____

d)

_____

e)

_____

f)

_____

7. Determine the measures of the indicated angles.

a)

$\angle 1 =$ _____

$\angle 2 =$ _____

$\angle 3 =$ _____

$\angle 4 =$ _____

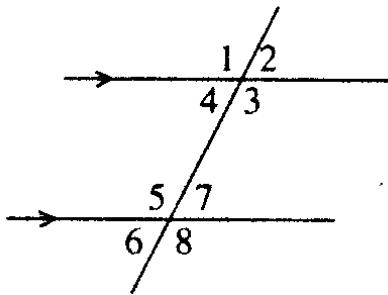47°
2
4   3
1   65°

b)

$\angle 5 =$ _____

$\angle 6 =$ _____

$\angle BFD =$ _____

B   C
5
A — 60° — D
F 6
E
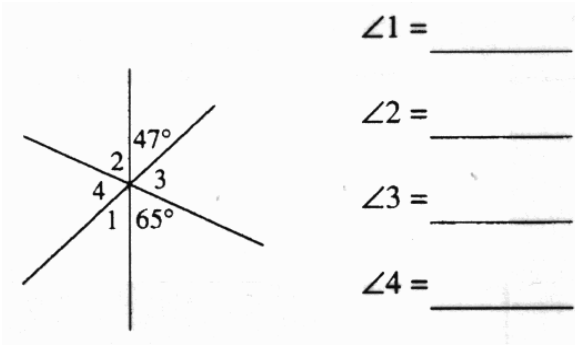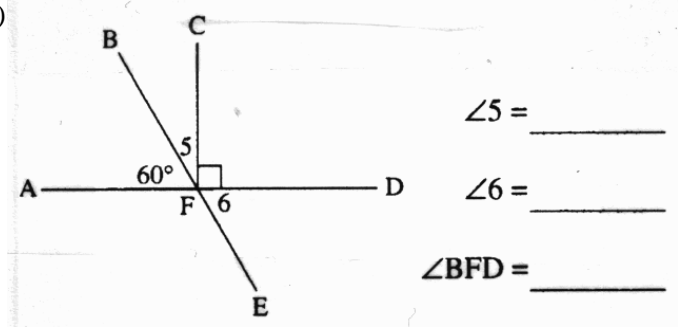
8. Indicate which of the following pairs of angles are either **equal** (E) or **supplementary** (S).

1 2
4 3

5 7
6 8

a) $\angle 1$ and $\angle 3$

b) $\angle 2$ and $\angle 7$

c) $\angle 3$ and $\angle 7$

d) $\angle 4$ and $\angle 6$

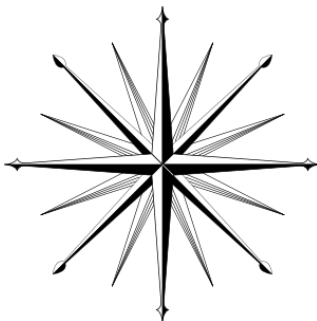e) $\angle 1$ and $\angle 6$

f) $\angle 2$ and $\angle 8$

g) $\angle 1$ and $\angle 5$

h) $\angle 5$ and $\angle 7$

i) $\angle 3$ and $\angle 6$

9. a) Label the *Compass Bearings Rose* below:

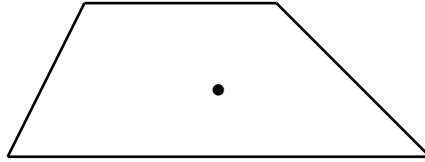b) What is the **true bearing** of the following directions?

i) W

ii SE

iii) SSW

10. The lengths of the sides of a quadrilateral are 3", 7", 11" and 15". Calculate the lengths of the sides of a similar quadrilateral that has a longest side of 30".

11. Enlarge the following shape by a scale factor of 2 using the *parallel method*.

12. If $\triangle FLD \sim \triangle MXQ$, determine which sides and angles correspond to the given information.

   a) $\angle F =$ d) $MX =$

   b) $FD =$ e) $\angle D =$

   c) $\angle X =$ f) $DL =$

13. Given that the two figures shown are **similar**, determine the values of a and y.