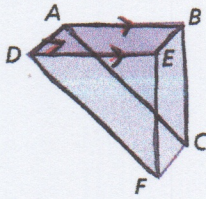


Name: \_\_\_\_\_

# Unit 3 Study Guide Review (textbook pp. 202-204)

## EXERCISES

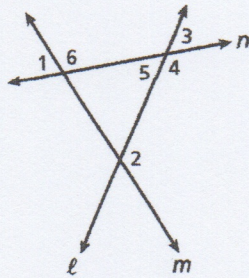
Identify each of the following.



6. a pair of skew segments
7. a pair of parallel segments
8. a pair of perpendicular segments

Identify the transversal and classify each angle pair.

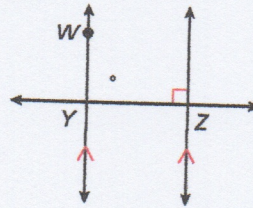
10.  $\angle 5$  and  $\angle 2$
11.  $\angle 6$  and  $\angle 3$
12.  $\angle 2$  and  $\angle 4$
13.  $\angle 1$  and  $\angle 2$



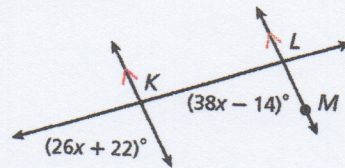
## EXERCISES

Find each angle measure.

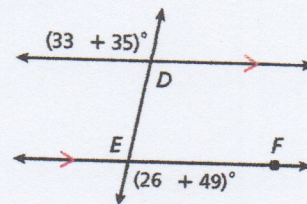
14.  $m\angle WYZ$



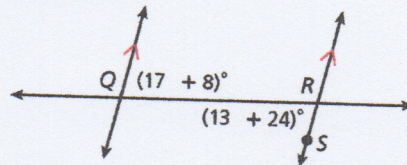
15.  $m\angle KLM$



16.  $m\angle DEF$

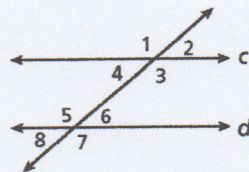


17.  $m\angle QRS$



## EXERCISES

Use the given information and theorems and postulates you have learned to show that  $c \parallel d$ .

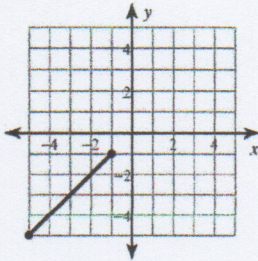


18.  $m\angle 4 = 58^\circ$ ,  $m\angle 6 = 58^\circ$
19.  $m\angle 1 = (23x + 38)^\circ$ ,  $m\angle 5 = (17x + 56)^\circ$ ,  $x = 3$
20.  $m\angle 6 = (12x + 6)^\circ$ ,  $m\angle 3 = (21x + 9)^\circ$ ,  $x = 5$
21.  $m\angle 1 = 99^\circ$ ,  $m\angle 7 = (13x + 8)^\circ$ ,  $x = 7$

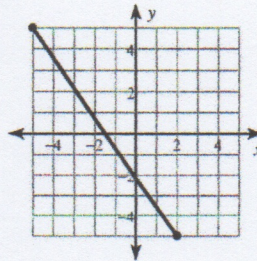
## The Midpoint Formula

Find the midpoint of each line segment.

1)



2)



Find the midpoint of the line segment with the given endpoints.

9)  $(-4, 4), (5, -1)$

10)  $(-1, -6), (-6, 5)$

11)  $(2, 4), (1, -3)$

12)  $(-4, 4), (-2, 2)$

13)  $(5, 2), (-4, -3)$

14)  $(-1, 1), (5, -5)$

15)  $(2, -1), (-6, 0)$

16)  $(-3.1, -2.8), (-4.92, -3.3)$

17)  $(-5.1, -2), (1.4, 1.7)$

18)  $(4.9, -1.3), (-5.2, -0.6)$

19)  $(5.1, 5.71), (6, 3.6)$

20)  $(3.1, -2.1), (-0.52, -0.6)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

21) Endpoint:  $(-1, 9)$ , midpoint:  $(-9, -10)$

22) Endpoint:  $(2, 5)$ , midpoint:  $(5, 1)$

23) Endpoint:  $(5, 2)$ , midpoint:  $(-10, -2)$

24) Endpoint:  $(9, -10)$ , midpoint:  $(4, 8)$

25) Endpoint:  $(-9, 7)$ , midpoint:  $(10, -3)$

26) Endpoint:  $(-6, 4)$ , midpoint:  $(4, 8)$