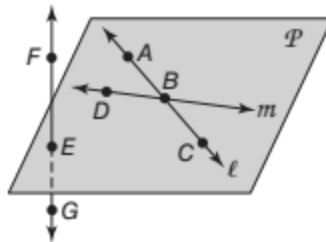


For 1-3, use the figure at the right.

1. Which is another name for line  $\ell$ ?



1.

2. Name the intersection of lines  $\ell$  and  $m$ .

2.

3. Name 3 points coplanar with point A.

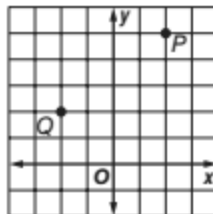
3.

4. Given A is between Y and Z and  $YA = 22$ ,  $AZ = 16x$ , and  $YZ = 166$

4.

5. Find the distance between points P and Q.

5.

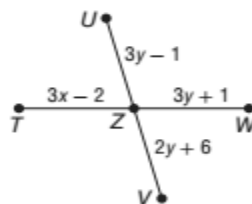


6. Find the midpoint of segment PQ.

6.

7. Find the value of  $x$  and  $y$  if  $UV$  bisects  $TW$  and  $UV = 40$ .

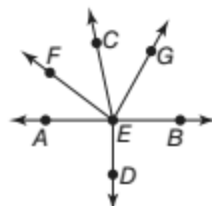
7.



For 8-9 use the figure to the right and  $\overrightarrow{EC}$  bisects  $\angle FEG$ .

8. Find the value of  $x$  if the  $m\angle FEG = 82$  and  $m\angle FEC = 5x + 11$

8.



9. If  $\angle AED = 16y + 10$ , find the value of  $y$  so that  
 $ED \perp AB$

9.

**For 10-13 use the figure at the right.**

10. Find the value of  $y$ .

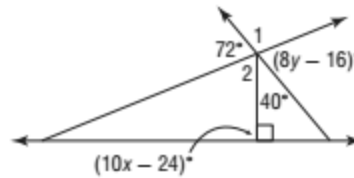
10.

11. Find the measure of  $\angle 1$ .

11.

12. Find the measure of  $\angle 2$ .

12.



13. Find the value of  $x$ .

13.

14. Two angles are supplementary. One of the angles is an acute angle.  
 What type of angle is  $\angle 2$ ?

14.

**For questions 15-22, refer to the figure at the right.**

15. What is the special name  
 for the angle pair 3 and 10?

15.

16. What is the special name  
 for the angle pair 1 and 7?

16.

17. Given  $p \parallel q$ , and  $m\angle 3 = 75^\circ$ .  
 Find the measure of  $m\angle 5$ .

17.

18. Given  $p \parallel q$ ,  $m\angle 10 = 3x - 7$  and  
 $m\angle 13 = 4x - 9$ . Find the value of  $x$ .

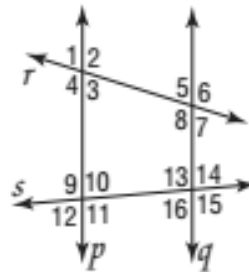
18.

19. Given that  $\angle 1$  is congruent to  $\angle 5$  which postulate or theorem  
 justifies that  $p \parallel q$

19.

20. Given that  $\angle 12$  is congruent to  $\angle 14$  which postulate or theorem

20.



justifies that  $p \parallel q$

21. If  $p \parallel q$  by the Consecutive Interior Angles Theorem, which pair of angles must be supplementary? 21.

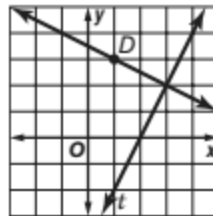
22. If  $m\angle 4 = 7x - 20$  and  $m\angle 8 = 5x + 18$ . Find the value of  $x$  so that  $p \parallel q$ . 22.

23. What is the slope of the line through  $(-6, 3)$  and  $(12, 9)$ ? 23.

24. What is the equation of the line, in slope-intercept form, of the line through  $(-4, 7)$  with a slope of  $\frac{1}{2}$ ? 24.

25. What is the equation of the line, in slope-intercept form, through the points  $(1, -3)$  and  $(7, 15)$ ? 25.

26. What is the distance from point  $D$  to line  $t$ ? 26.



27. What is the distance between parallel lines whose equations are  $y = 2x + 7$  and  $y = 2x - 3$ . 27.