

Name: _____

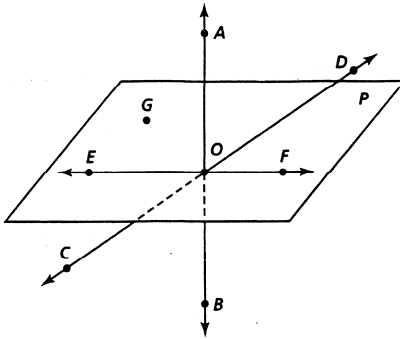
Chapter 1 Test Review Sheet

Find the next number in the pattern.

1. -7, -4, -1, 2

2. 5, 8, 13, 20, 29

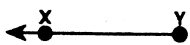
Decide if the statements are true or false.



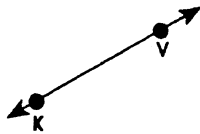
- 3. $G, E,$ and F are coplanar.
- 4. \overrightarrow{OD} and \overrightarrow{OB} are opposite rays.
- 5. $E, F,$ and O are collinear.

Identify the following using symbols.

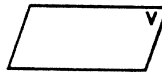
6.



7.



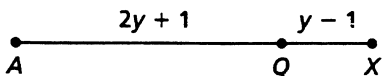
8.



9.



10.



$AX = 45$. Find x , AQ , QX .

Find the distance between each pair of points. Leave answer in simplest radical form.

11. $(0, 2)$ and $(6, 5)$

12. $(-4, 7)$ and $(6, 2)$

Find the midpoint between each pair of points.

13. $(-2, 3)$ and $(5, -2)$

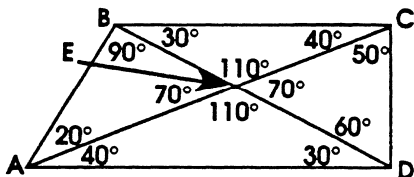
14. $(0, -7)$ and $(-2, -1)$

M is the midpoint of segment AB . If the coordinates of M and A are given, find the coordinates of B .

15. $M(2, 4)$ and $A(-1, 7)$

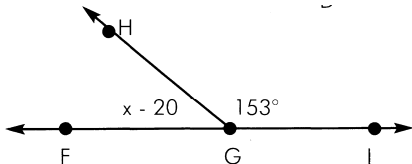
16. $M(10, -7)$ and $A(6, 7)$

Classify each angle as acute, right, obtuse or straight.

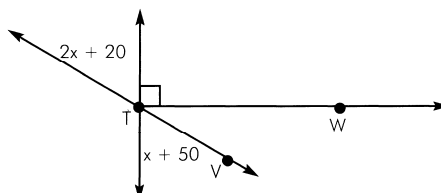


- 17. $\angle ABC$
- 18. $\angle BEA$
- 19. $\angle BAD$
- 20. $\angle AEC$
- 21. $\angle BCD$

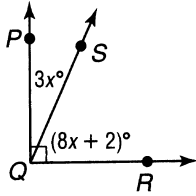
22. Find x



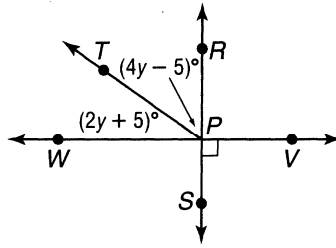
23. Find x



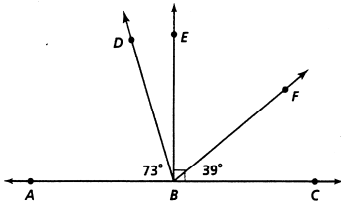
24. Find x , $m\angle PQS$, $m\angle SQR$



25. Find y , $m\angle WPT$



26.



Find:

$m\angle EBF$, $m\angle EBA$, $m\angle DBE$

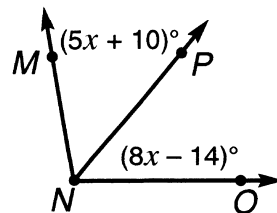
$m\angle DBC$, $m\angle ABF$, $m\angle DBF$

27.

\overrightarrow{NP} bisects $\angle MNO$.

$m\angle PNO =$ _____

$m\angle MNO =$ _____

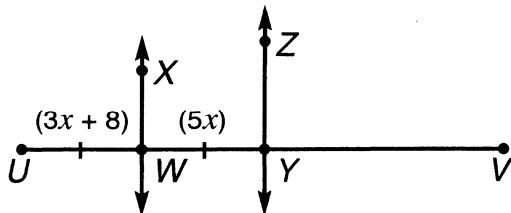


28.

\overrightarrow{YZ} bisects \overline{UV} . \overrightarrow{WX} bisects \overline{UY} .

$UW =$ _____ $YV =$ _____

$UV =$ _____



$\angle A$ and $\angle B$ are complementary.

31. $m\angle A = 2.5x + 17$, $m\angle B = 8x - 11$. Find x ,

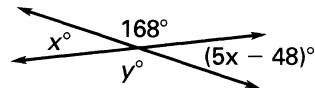
and the measure of each angle.

32. The complement of an angle is 6 less than twice the measure of the angle itself. Find each angle.

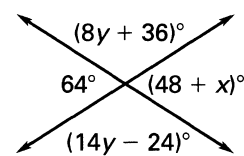
33. Three times the measure of the supplement of an angle is equal to eight times the measure of its complement. Find the angle, its complement and its supplement.

(hint: Let $x =$ angle, $90 - x =$ its complement, $180 - x =$ its supplement)

29.



30.



Solutions to Review Sheet

1. 5 2. 40 3. True 4. False 5. True

6. \overline{YX} 7. \overline{KV} or \overline{VK} 8. *plane V* 9. \overline{AB} or \overline{BA}

10. $2y + 1 + y - 1 = 45$

$$3y = 45$$

$$y = 15 \quad AQ = 2(15) + 1 = 31 \quad QX = 15 - 1 = 14$$

11. $\sqrt{(0-6)^2 + (2-5)^2} = \sqrt{(-6)^2 + (-3)^2} = \sqrt{36+9} = \sqrt{45} = 3\sqrt{5}$

12. $\sqrt{(-4-6)^2 + (7-2)^2} = \sqrt{(-10)^2 + 5^2} = \sqrt{100+25} = \sqrt{125} = 5\sqrt{5}$

13. $\left(\frac{-2+5}{2}, \frac{3+(-2)}{2}\right) = \left(\frac{3}{2}, \frac{1}{2}\right)$

14. $\left(\frac{0+(-2)}{2}, \frac{-7+(-1)}{2}\right) = \left(\frac{-2}{2}, \frac{-8}{2}\right) = (-1, -4)$

15. $(2, 4) = \left(\frac{-1+x}{2}, \frac{7+y}{2}\right)$

$$2 = \frac{-1+x}{2}$$

$$4 = \frac{7+y}{2}$$

$$4 = -1 + x$$

$$8 = 7 + y$$

$$5 = x$$

$$1 = y$$

$B(5, 1)$

16. $(10, -7) = \left(\frac{6+x}{2}, \frac{7+y}{2}\right)$

$$10 = \frac{6+x}{2}$$

$$-7 = \frac{7+y}{2}$$

$$20 = 6 + x$$

$$-14 = 7 + y$$

$$14 = x$$

$$-21 = y$$

$B(14, -21)$

17. *obtuse* 18. *acute* 19. *acute* 20. *straight* 21. *right*

22. $x - 20 + 153 = 180$

$$x + 133 = 180$$

$$x = 47$$

23. $2x + 20 = x + 50$

$$x = 30$$

24. $3x + 8x + 2 = 90$

$$11x = 88$$

$$x = 8$$

$$m\angle PQS = 3(8) = 24$$

$$m\angle SQR = 8(8) + 2 = 66$$

25. $4y - 5 + 2y + 5 = 90$

$$6y = 90$$

$$y = 15$$

$$m\angle WPT = 2(15) + 5 = 35$$

$$26. m\angle EBF = 51, m\angle EBA = 90, m\angle DBE = 17, m\angle DBC = 107, m\angle ABF = 141, m\angle DBF = 68$$

$$27. 5x + 10 = 8x - 14$$

$$3x = 24$$

$$x = 8$$

$$m\angle PNO = 5(8) + 10 = 50$$

$$m\angle MNO = 50 + 50 = 100$$

$$28. 3x + 8 = 5x \quad UW = 3(4) + 8 = 20$$

$$2x = 8 \quad YW = 5(4) = 20$$

$$x = 4 \quad UV = 20 + 20 + 40 = 80$$

$$29. x = 5x - 48 \quad y = 168$$

$$-4x = -48$$

$$x = 12$$

$$30. 48 + x = 64 \quad 8y + 36 = 14y - 24$$

$$x = 16 \quad 6y = 60$$

$$y = 10$$

$$31. 2.5x + 17 + 8x - 11 = 90$$

$$10.5x + 6 = 90$$

$$10.5x = 84$$

$$x = 8$$

$$m\angle A = 2.5(8) + 17 = 37$$

$$m\angle B = 8(8) - 11 = 53$$

32. Let x = measure of the angle

$90 - x$ = measure of the complement

$$90 - x = 2x - 6$$

$$3x = 96$$

$x = 32$ (measure of original angle)

$$90 - 32 = 58 \text{ (complement)}$$

$$33. 3(180 - x) = 8(90 - x)$$

$$540 - 3x = 720 - 8x$$

$$5x = 180$$

$$x = 36 \text{ (original angle)}$$

$$90 - 36 = 54 \text{ (complement)}$$

$$180 - 36 = 144 \text{ (sup plemenet)}$$