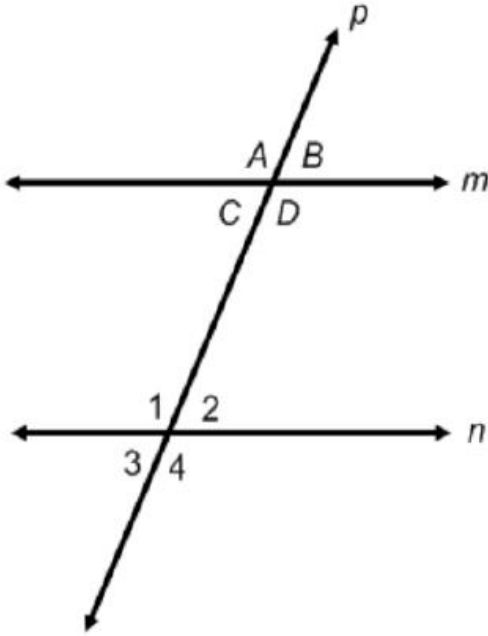


Lines and Angles Worksheet

For numbers 1 – 12, use the image below and the word bank to answer the questions.



alternate interior	alternate exterior
corresponding	vertical
supplementary	complimentary

1. Which line is the transversal?
2. State the relationship between angles A and 4 .
3. State the relationship between angles 1 and 2 . Explain why.
4. State the relationship between angles C and D .
5. State the relationship between angles B and D .
6. State the relationship between angles C and 2 .
7. State the relationship between angles B and 3 .

8. If angle 1 is 110° , what is the measure of angle D ? Explain why.

9. If angle A is 136° , what is the measure of angle 4? Explain why.

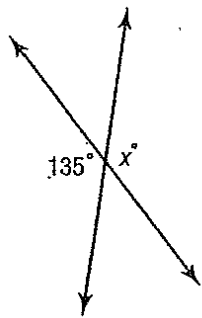
10. If angle 3 is 30° , what is the measure of angle C ? Explain why.

11. If angle B is 25° , what is the measure of angle C ? Explain why.

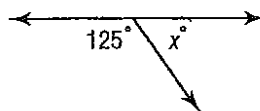
12. If angle 2 is 45° , what is the measure of angle 4? Explain why.

For numbers 13 – 21, find the value of x in each figure.

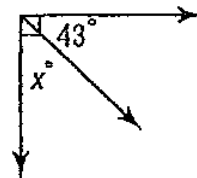
13.



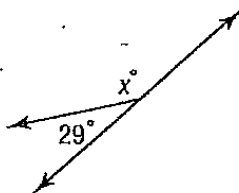
14.



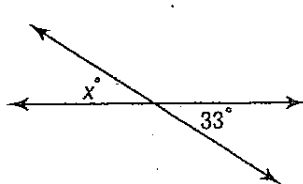
15.



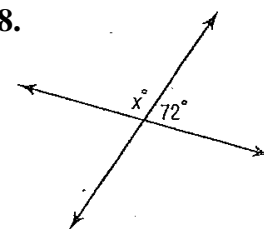
16.



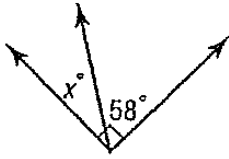
17.



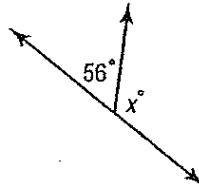
18.



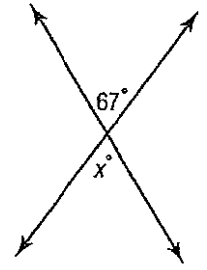
19.



20.



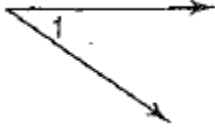
21.



For numbers 22 – 27, use the word bank provided to classify each angle or angle pair using all names that apply. (The number of blank lines is the number of expected answers)

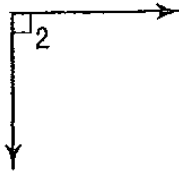
Acute Angle	Obtuse Angle	Right Angle
Adjacent Angles	Vertical Angles	
Supplementary Angles	Complimentary Angles	

22.



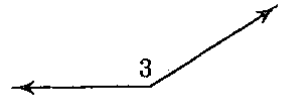
$\angle 1 =$ _____

23.



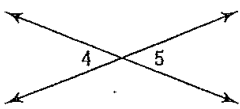
$\angle 2 =$ _____

24.



$\angle 3 =$ _____

25.

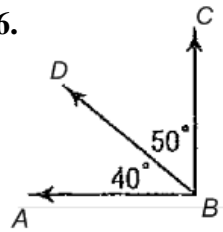


$\angle 4 =$ _____

$\angle 5 =$ _____

$\angle 4 \ \& \ \angle 5 =$ _____

26.



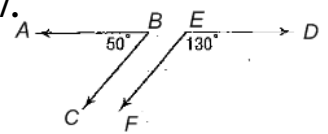
$\angle ABD =$ _____

$\angle DBC =$ _____

$\angle ABD \ \& \ \angle DBC =$ _____

$\angle ABD \ \& \ \angle DBC =$ _____

27.



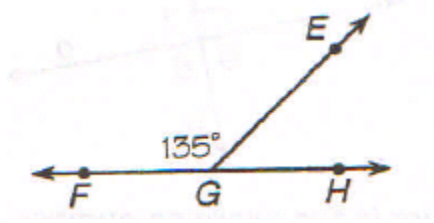
$\angle ABC =$ _____

$\angle DEF =$ _____

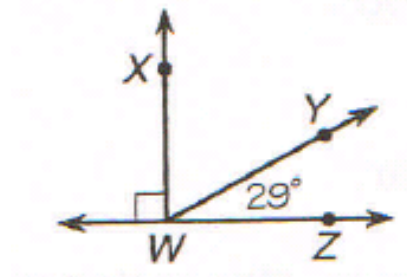
$\angle ABC \ \& \ \angle DEF =$ _____

For numbers 28 – 37, use the given angle measures to find the required ones.

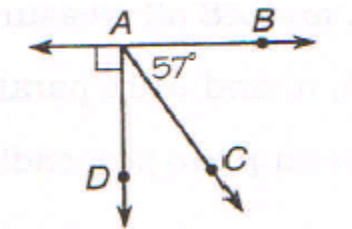
28. Find the measure of $\angle EGH$



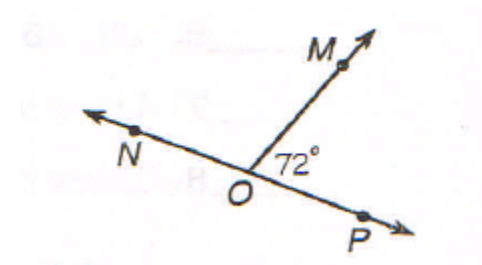
29. Find the measure of $\angle XWY$



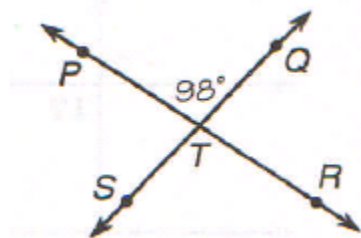
30. Find the measure of $\angle DAC$



31. Find the measure of $\angle MON$

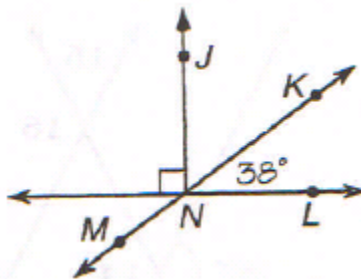


32. Find the measure of $\angle STR$



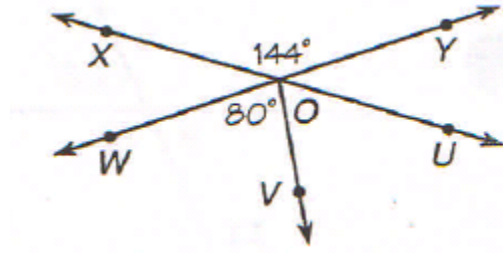
33. Find the measure of $\angle PTS$

34. Find the measure of $\angle JNK$



35. Find the measure of $\angle MNL$

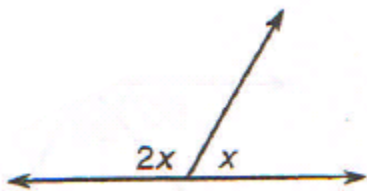
36. Find the measure of $\angle YOU$



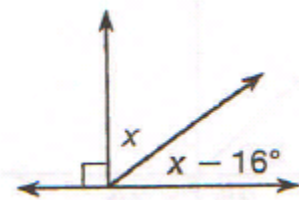
37. Find the measure of $\angle UOV$

In numbers 38-41, use an algebraic equation to find the value of x .

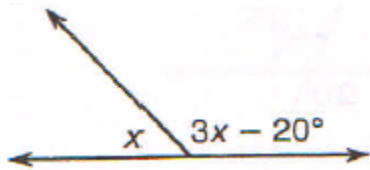
38.



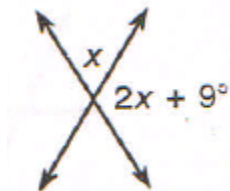
39.



40.

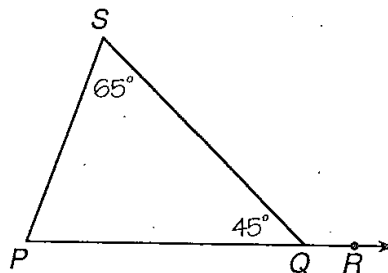


41.



42. $m\angle SQR =$ _____ (A)

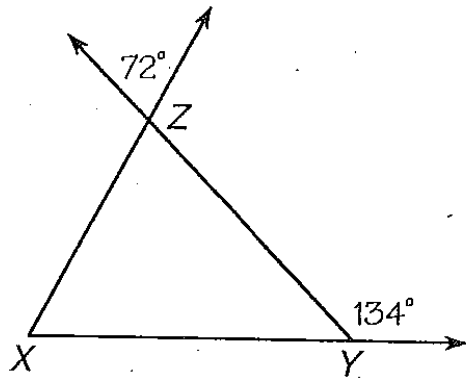
43. $m\angle P =$ _____ (S)



44. $m\angle XZY =$ _____ (L)

45. $m\angle ZYX =$ _____ (D)

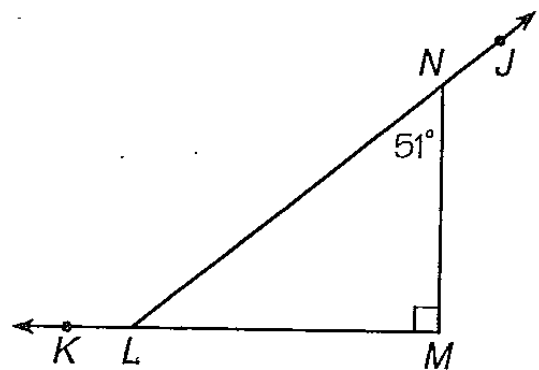
46. $m\angle X =$ _____ (B)



47. $m\angle JNM =$ _____ (U)

48. $m\angle NLM =$ _____ (Z)

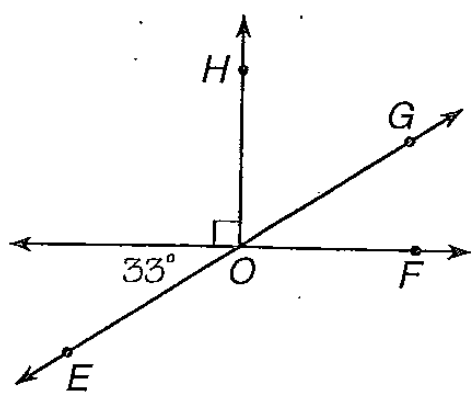
49. $m\angle NLK =$ _____ (I)



50. $m\angle FOG =$ _____ (Q)

51. $m\angle GOH =$ _____ (H)

52. $m\angle EOF =$ _____ (R)



53. $m\angle UVW =$ _____ (C)

54. $m\angle VWU =$ _____ (E)

55. $m\angle UWT =$ _____ (N)

