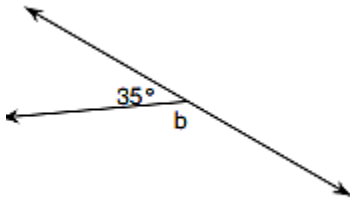


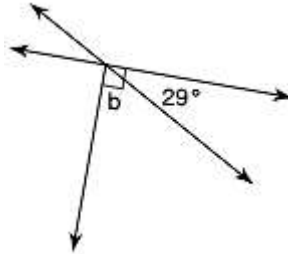
Unit 2 Study Guide

For problems 1-3, name the types of angles (complementary, supplementary, or vertical) and find b .

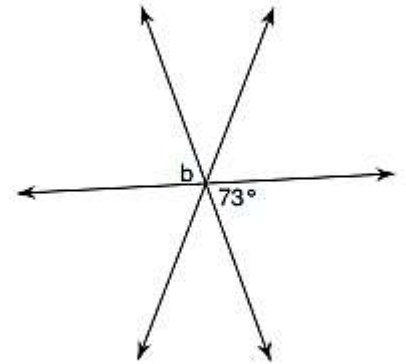
1.



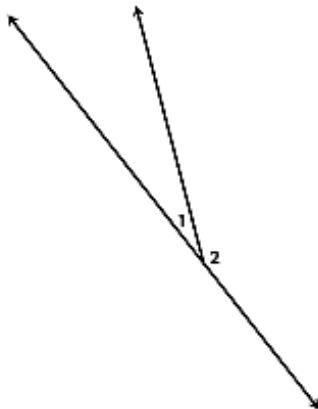
2.



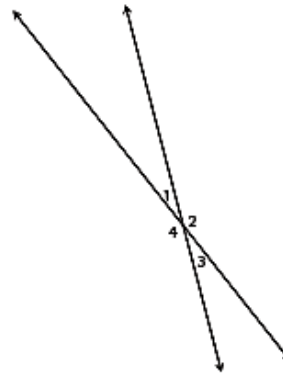
3.



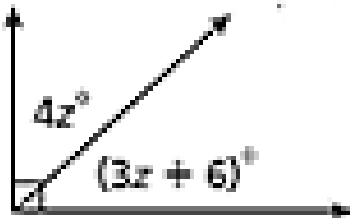
4. In the diagram below, $\angle 1$ and $\angle 2$ are a linear pair. Find $m\angle 1$ if $m\angle 1 = 2x - 9$ and $m\angle 2 = 10x + 9$.



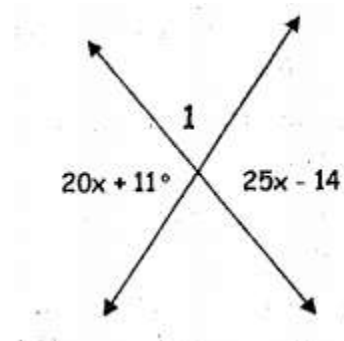
5. Find $m\angle 4$ in the diagram below if $m\angle 1 = 8x + 6$ and $m\angle 3 = 5x + 21$



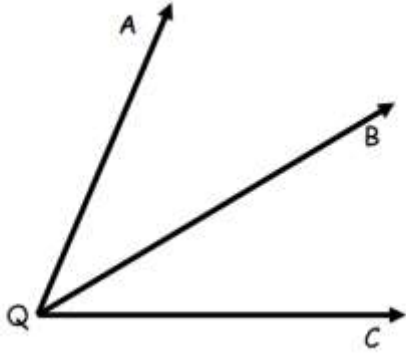
6. Solve for z .



7. Solve for x .



8.

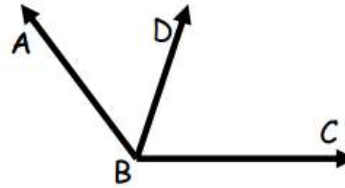


QB is the angle bisector of $\angle AQC$.
 $m\angle AQB = 5x$
 $m\angle BQC = 8x - 24$

Find the following:

$x =$ _____ $m\angle AQB =$ _____
 $m\angle BQC =$ _____ $m\angle AQC =$ _____

9.

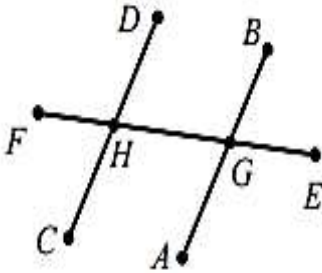


$m\angle ABC = 122$
 $m\angle ABD = 8x + 20$
 $m\angle DBC = 22x - 3$

Find the following:

$x =$ _____ $m\angle ABD =$ _____
 $m\angle DBC =$ _____

For problems 10-15, name the types of angles listed (alt ext, alt int, same side ext, same side int, corresponding).



10. $\angle DHG$ & $\angle HGA$

11. $\angle FHC$ & $\angle DHG$

12. $\angle BGE$ & $\angle FHC$

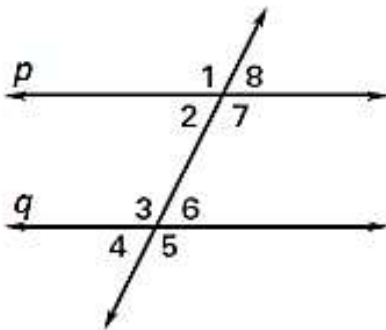
13. $\angle EGA$ & $\angle GHC$

14. $\angle AGH$ & $\angle EGA$

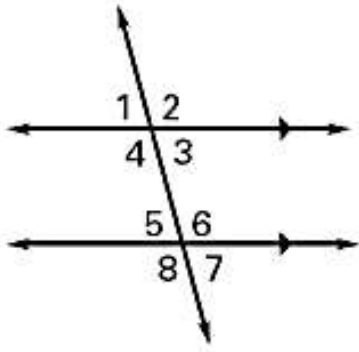
15. $\angle DHG$ & $\angle BGH$

16.

If $p \parallel q$ and $m\angle 1 = 75^\circ$, find the measures of all the angles formed by the parallel lines cut by the transversal.



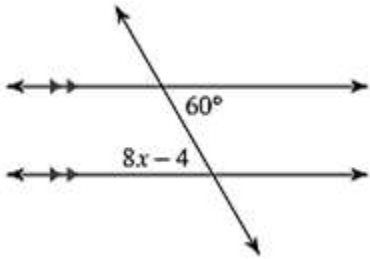
$m\angle 1 =$ _____ $m\angle 2 =$ _____
 $m\angle 3 =$ _____ $m\angle 4 =$ _____
 $m\angle 5 =$ _____ $m\angle 6 =$ _____
 $m\angle 7 =$ _____ $m\angle 8 =$ _____



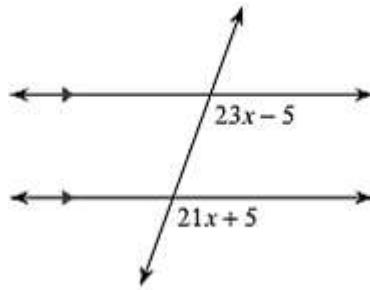
1. If the $m\angle 2 = 113^\circ$, what is the $m\angle 6$?
2. If the $m\angle 4 = 100^\circ$, what is the $m\angle 6$?
4. If the $m\angle 7 = 75^\circ$, what is the $m\angle 1$?
5. If the $m\angle 3 = 81^\circ$, what is the $m\angle 4$?

Name the angle relationship and then solve for x:

18.



19.



20.

