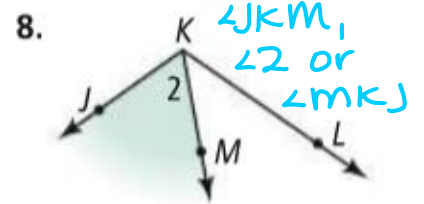
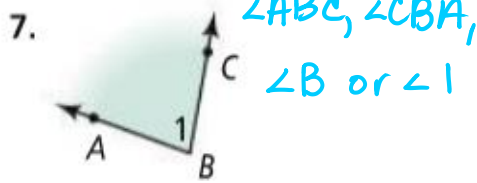
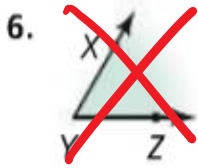


DAY 2 - 14 HOMEWORK
 PAGE 31 #7-8, 15-21 ODD, 22, 28-30
 PAGE 38 #26-30 EVEN

Name each shaded angle in three different ways.

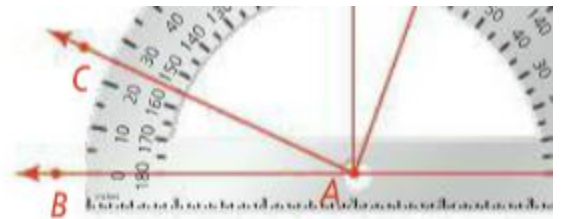
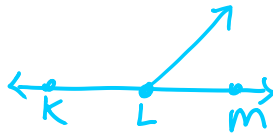


Draw a figure that fits each description. *ODDS only!*

15. an obtuse angle, $\angle RST$ *answers vary*

16. an acute angle, $\angle GHJ$

17. a straight angle, $\angle KLM$



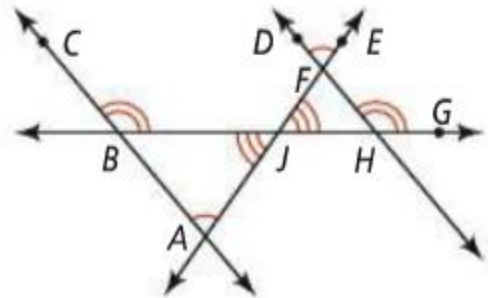
Use the diagram below. Complete each statement.

18. $\angle CBJ \cong \blacksquare$

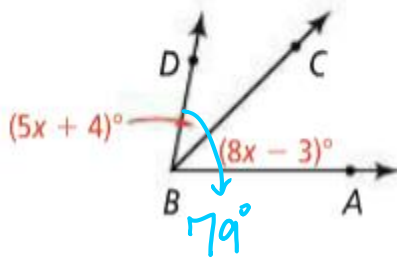
19. $\angle FJH \cong \blacksquare$ *$\angle BJA$*

20. If $m\angle EFD = 75$, then $m\angle JAB = \blacksquare$.

21. If $m\angle GHF = 130$, then $m\angle JBC = \blacksquare$ *130°*



22. If $m\angle ABD = 79$, what are $m\angle ABC$ and $m\angle DBC$?



$$5x + 4 + 8x - 3 = 79$$

$$13x + 1 = 79$$

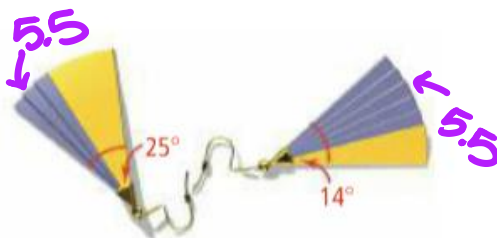
$$13x = 78$$

$$x = 6$$

$$m\angle ABC = 45^\circ$$

$$m\angle DBC = 34^\circ$$

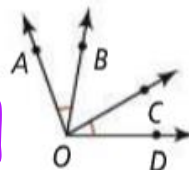
28. **Think About a Plan** A pair of earrings has blue wedges that are all the same size. One earring has a 25° yellow wedge. The other has a 14° yellow wedge. Find the angle measure of a blue wedge.
- How do the angle measures of the earrings relate?
 - How can you use algebra to solve the problem?



Algebra Use the diagram at the right for Exercises 29 and 30. Solve for x . Find the angle measures to check your work.

29. $m\angle AOB = 4x - 2$, $m\angle BOC = 5x + 10$, $m\angle COD = 2x + 14$ $x = 8$

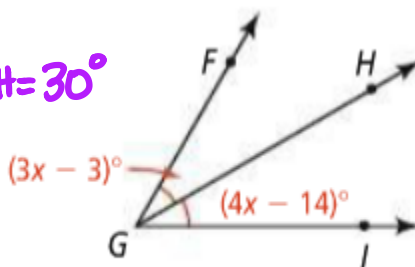
30. $m\angle AOB = 28$, $m\angle BOC = 3x - 2$, $m\angle AOD = 6x$ $x = 18$



**need to show all your work for credit!*

26. **Algebra** In the diagram, \overrightarrow{GH} bisects $\angle FGI$.

- Solve for x and find $m\angle FGH$. $x=11$, $m\angle FGH=30^\circ$
- Find $m\angle HGI$. $=30^\circ$
- Find $m\angle FGI$. $=60^\circ$



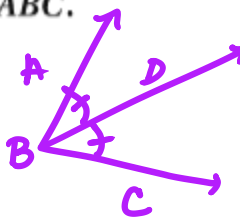
Algebra \overrightarrow{BD} bisects $\angle ABC$. Solve for x and find $m\angle ABC$.

27. $m\angle ABD = 5x$, $m\angle DBC = 3x + 10$

28. $m\angle ABC = 4x - 12$, $m\angle ABD = 24$

29. $m\angle ABD = 4x - 16$, $m\angle CBD = 2x + 6$

30. $m\angle ABD = 3x + 20$, $m\angle CBD = 6x - 16$



*28. $2(24) = 4x - 12$

$x = 15$
 $m\angle ABC = 48$

$3x + 20 = 6x - 16$

$x = 12$ $m\angle ABC = 112^\circ$