Day 2 - 14 Homework

Page 31 #7-8. 15-21 ODD. 22. 28-30

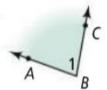
Page 38 #26-30 EVEN

Name each shaded angle in three different ways.

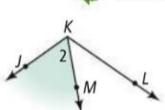
6.



7.



8.



See Pro

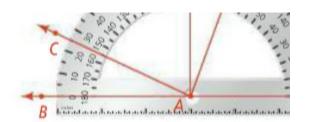
Draw a figure that fits each description.

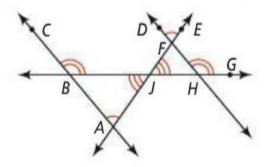
- **15.** an obtuse angle, $\angle RST$
- **16.** an acute angle, $\angle GHJ$
- **17.** a straight angle, $\angle KLM$

Use the diagram below. Complete each statement.

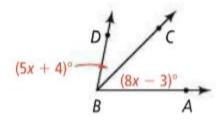
20. If
$$m \angle EFD = 75$$
, then $m \angle JAB = \blacksquare$.

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





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





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.

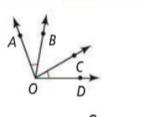


- · How do the angle measures of the earrings relate?
- · How can you use algebra to solve the problem?

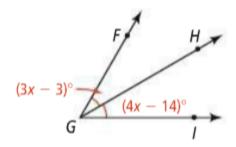
Algebra Use the diagram at the right for Exercises 29 and 30. Solve for x. Find the angle measures to check your work.

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

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



- **26.** Algebra In the diagram, \overrightarrow{GH} bisects $\angle FGI$.
 - **a.** Solve for *x* and find $m \angle FGH$.
 - **b.** Find $m \angle HGI$.
 - **c.** Find $m \angle FGI$.



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