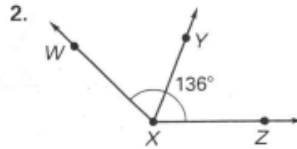
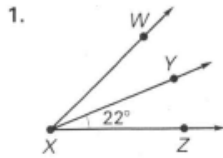


Cumulative Review

For use after Chapters 1-4

\vec{XY} is the angle bisector of $\angle WXZ$. Find the two angle measures not given in the diagram. (1.5)



$\angle A$ and $\angle B$ are supplementary. Find $m\angle A$ and $m\angle B$. (1.6)

3. $m\angle A = 5x + 2$
 $m\angle B = 9x + 10$

4. $m\angle A = 20x + 4$
 $m\angle B = 7x - 13$

Using p and q below, write the symbolic statement in words. (2.3)

p : Two angle measures have a sum of 180° .

q : The two angles are supplementary.

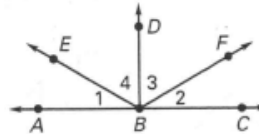
5. $q \rightarrow p$

6. $\sim p \rightarrow \sim q$

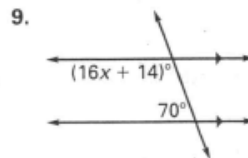
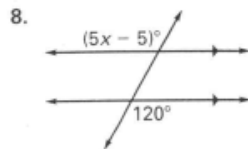
Write a two-column proof. (2.6)

7. Given: $\angle ABD$ and $\angle CBD$ are right angles.
 $\angle 1 \cong \angle 2$

Prove: $\angle 3 \cong \angle 4$



Find the value of x . (3.3)



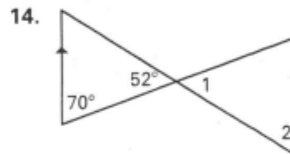
Find the slope of \vec{AB} and \vec{CD} . Then determine if the lines are parallel or perpendicular. (3.6)

10. $A(-3, 4), B(5, 0)$
 $C(6, 2), D(8, 6)$

11. $A(7, 1), B(6, -3)$
 $C(5, 3), D(-3, 5)$

12. $A(3, 3), B(6, 4)$
 $C(-5, 7), D(1, 9)$

Find the measure of the numbered angles. (4.1)

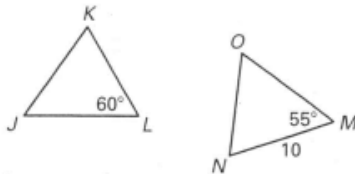


Cumulative Review

For use after Chapters 1-4

In the diagram, $\triangle JKL \cong \triangle MNO$. Complete the statement. (4.2)

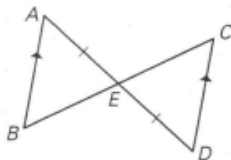
15. $\angle N \cong$?
16. $JK =$?
17. $m\angle K =$?



Write a two-column proof. (4.3 and 4.4)

18. Given: $\overline{AB} \parallel \overline{DC}$
 $\overline{AE} \cong \overline{DE}$

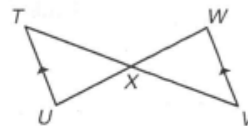
Prove: $\triangle ABD \cong \triangle DCE$



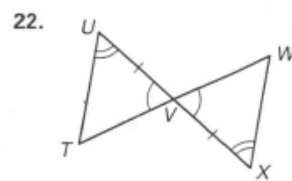
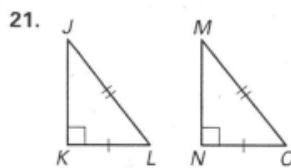
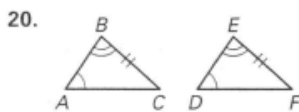
19. Given: X is the midpoint of \overline{UV} .

$\overline{TU} \parallel \overline{VW}$

Prove: $\triangle TUX \cong \triangle VWX$



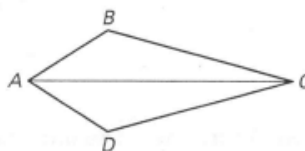
State the theorem used to prove the triangles are congruent. (4.4, 4.6)



Write a two-column proof. (4.5)

23. Given: $\overline{AD} \cong \overline{AB}$
 \overline{AC} bisects $\angle BAD$.

Prove: $\overline{BC} \cong \overline{DC}$



Place the figure in a coordinate plane. Use the distance formula to find the given information. (4.7)

24. Rectangle with length 8 units and width 6 units. Find the length of a diagonal.
25. Square with sides 5 units. Find the length of a diagonal to the nearest hundredth.

Review and Assess