

Cumulative Review

For use after Chapters 1–10

$\angle A$ and $\angle B$ are complementary. Find the measure of $\angle A$ and $\angle B$. (1.6)

1. $m\angle A = (9x - 14)^\circ$

$m\angle B = (8x + 2)^\circ$

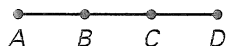
2. $m\angle A = (7x + 8)^\circ$

$m\angle B = (2x + 1)^\circ$

Write a two-column proof. (2.5, 2.6)

3. Given: $\overline{AC} \cong \overline{BD}$

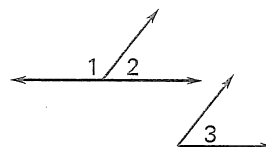
Prove: $\overline{AB} \cong \overline{CD}$



4. Given: $\angle 1$ and $\angle 2$ are a linear pair.

$\angle 2 \cong \angle 3$

Prove: $\angle 1$ and $\angle 3$ are supplementary.



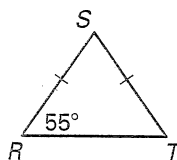
Write the equation of \overleftrightarrow{AB} . (3.6)

5. $A(3, -3), B(-4, 11)$

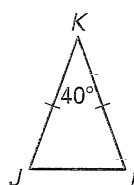
6. $A(-1, -8), B(2, 13)$

Find the unknown measure. (4.6)

7. $m\angle T = ?$
 $m\angle S = ?$



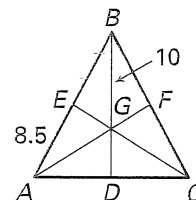
8. $m\angle J = ?$
 $m\angle L = ?$



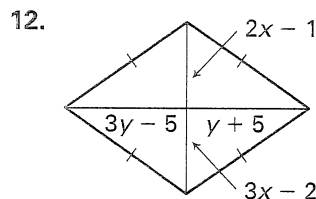
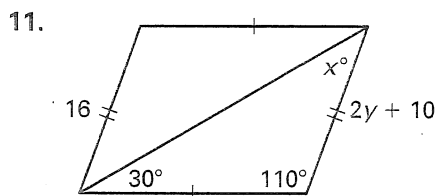
In Exercises 9 and 10, G is the centroid of $\triangle ABC$, and $\overline{BD} \perp \overline{AC}$. Find the given measure. (5.3)

9. $AB = ?$

10. $BD = ?$



Find the value of x and y . (6.2)



Consider the translation that is defined by $(x, y) \rightarrow (x - 3, y + 6)$. (7.4)

13. What is the image of $(2, 5)$?

$ABCD \sim EFGH$ (8.3)

14. Find AB .

15. Find $m\angle E$.

