

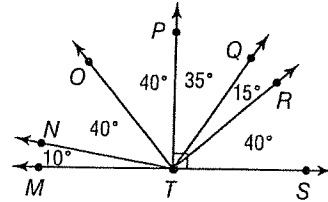
Practice

Chapter 12 Review Packet

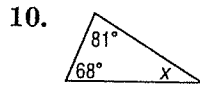
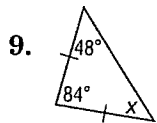
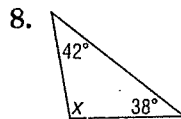
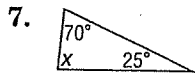
Triangles

Classify each angle as *acute*, *obtuse*, *right*, or *straight*.

- | | |
|-----------------|-----------------|
| 1. $\angle MTN$ | 2. $\angle MTO$ |
| 3. $\angle MTP$ | 4. $\angle MTQ$ |
| 5. $\angle MTR$ | 6. $\angle NTO$ |



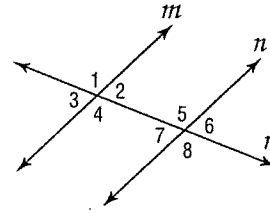
Find the value of x in each triangle. Then classify each triangle by its angles and by its sides.



Practice

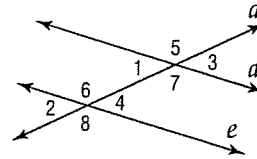
Angle and Line Relationships

In the figure at the right, $m \parallel n$ and r is a transversal.
If $m\angle 2 = 45^\circ$, find the measure of each angle.



- | | |
|---------------|---------------|
| 1. $\angle 4$ | 2. $\angle 5$ |
| 3. $\angle 7$ | 4. $\angle 8$ |
| 5. $\angle 6$ | 6. $\angle 3$ |

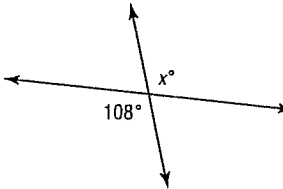
In the figure at the right, $d \parallel e$ and a is a transversal.
If $m\angle 5 = 143^\circ$, find the measure of each angle.



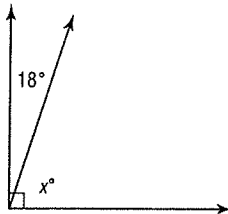
- | | |
|----------------|----------------|
| 7. $\angle 7$ | 8. $\angle 6$ |
| 9. $\angle 4$ | 10. $\angle 2$ |
| 11. $\angle 1$ | 12. $\angle 8$ |

Classify the pairs of angles shown. Then find the value of x in each figure.

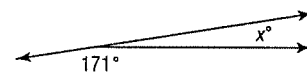
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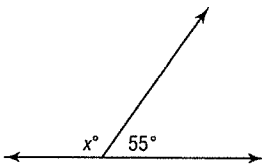
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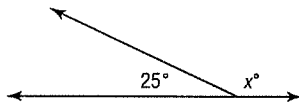
15.



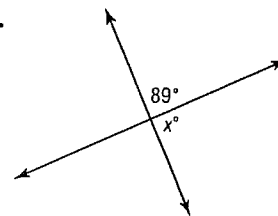
16.



17.



18.



19. Angles Q and R are complementary. Find $m\angle R$ if $m\angle Q = 24^\circ$.
20. Find $m\angle J$ if $m\angle K = 29^\circ$ and $\angle J$ and $\angle K$ are supplementary.
21. The measures of angles A and B are equal and complementary. What is the measure of each angle?
22. **ALGEBRA** Angles G and H are complementary. If $m\angle G = 3x + 6$ and $m\angle H = 2x - 11$, what is the measure of each angle?

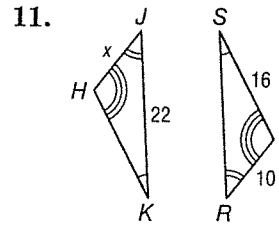
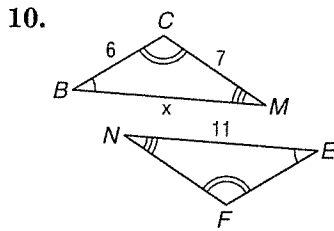
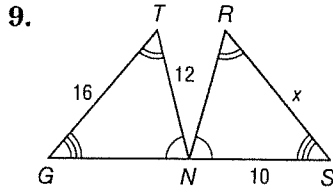
Practice

Congruent Triangles

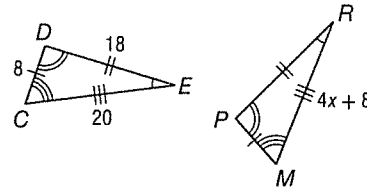
Complete the congruence statement if $\triangle CMH \cong \triangle PLF$ and $\triangle DNO \cong \triangle AET$.

1. $\angle M \cong$?
2. $\overline{MC} \cong$?
3. $\overline{DN} \cong$?
4. $\angle A \cong$?
5. $\overline{FL} \cong$?
6. $\angle C \cong$?
7. $\overline{TE} \cong$?
8. $\angle O \cong$?

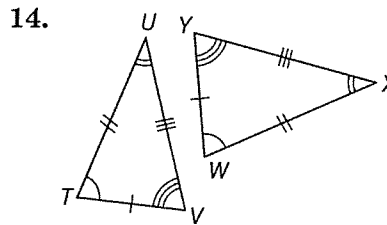
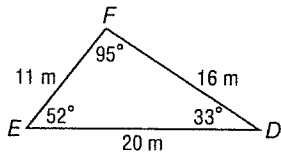
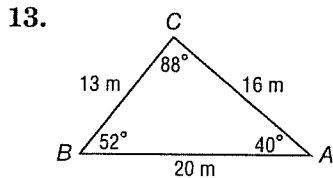
Find the value of x for each pair of congruent triangles.



12. ALGEBRA If $\triangle DEC \cong \triangle PRM$, what is the value of x ?



Determine whether the triangles shown are congruent. If so, name the corresponding parts and write a congruence statement.



ARCHITECTURE For Exercises 15 and 16, use the diagram of the Eiffel Tower truss at the right and the fact that $\triangle ACB \cong \triangle DFE$.

15. Find the distance between A and B.

16. What is the measure of $\angle B$?

