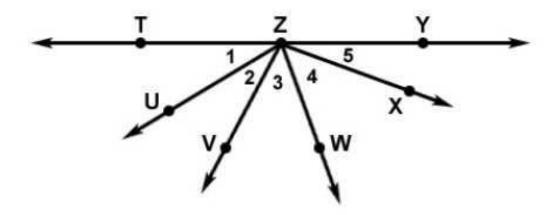
## Basic Figures - Angle Addition Postulate & Angle Bisector

Use the diagram below to answer questions 1 – 16:



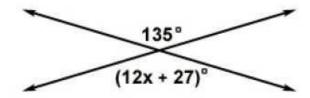
- Name an angle adjacent to ∠UZY.
- Name an angle adjacent to ∠XZT.
- Name 3 angles adjacent to ∠ XZV.
- Name 3 angles adjacent to ∠WZY.
- 5. If  $m \angle 3 = 8x$ ,  $m \angle 4 = 4(x + 10)$ , and  $m \angle VZX = 124^{\circ}$ , find x.
- 6. If  $m \angle 4 = 9x 2$ ,  $m \angle 5 = 5(x + 9)$ , and  $m \angle WZY = 85^{\circ}$ , find x.
- Suppose that ZU bisects ∠TZV, m∠1 = 9x 14, and m∠2 = 5x 2. Find x and m∠1.

## Angle Pairs - Complementary & Supplementary Angles (Part II)

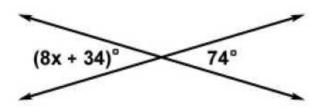
- If ∠V and ∠W are supplementary, and m∠V = 12x + 5 and m∠W = 127, find x.
- If ∠S and ∠T are complementary, and m∠S = 4x + 3 and m∠T = 39, find x.

## Angle Pairs - Vertical Angles

7. Using the diagram shown, find the value of x.



8. Using the diagram shown, find the value of x.



9. Using the diagram shown, find: x,  $m \angle$  AEC, and  $m \angle$  BED.

