

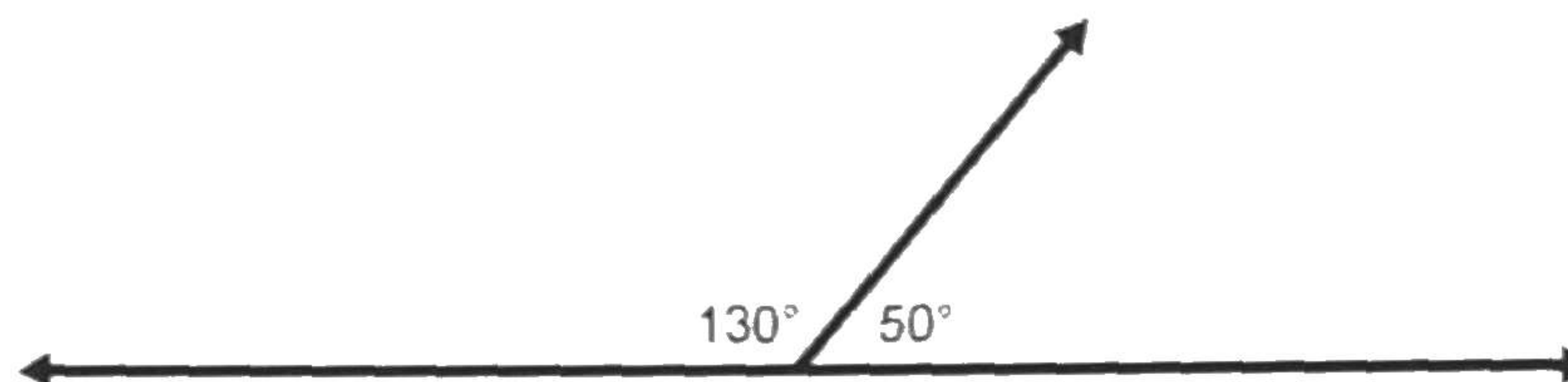
Understand Angle Relationships: Play

Number of Questions: 15

Questions 1–13 are selected-response questions. Write the letters of the correct answers on the answer sheet.

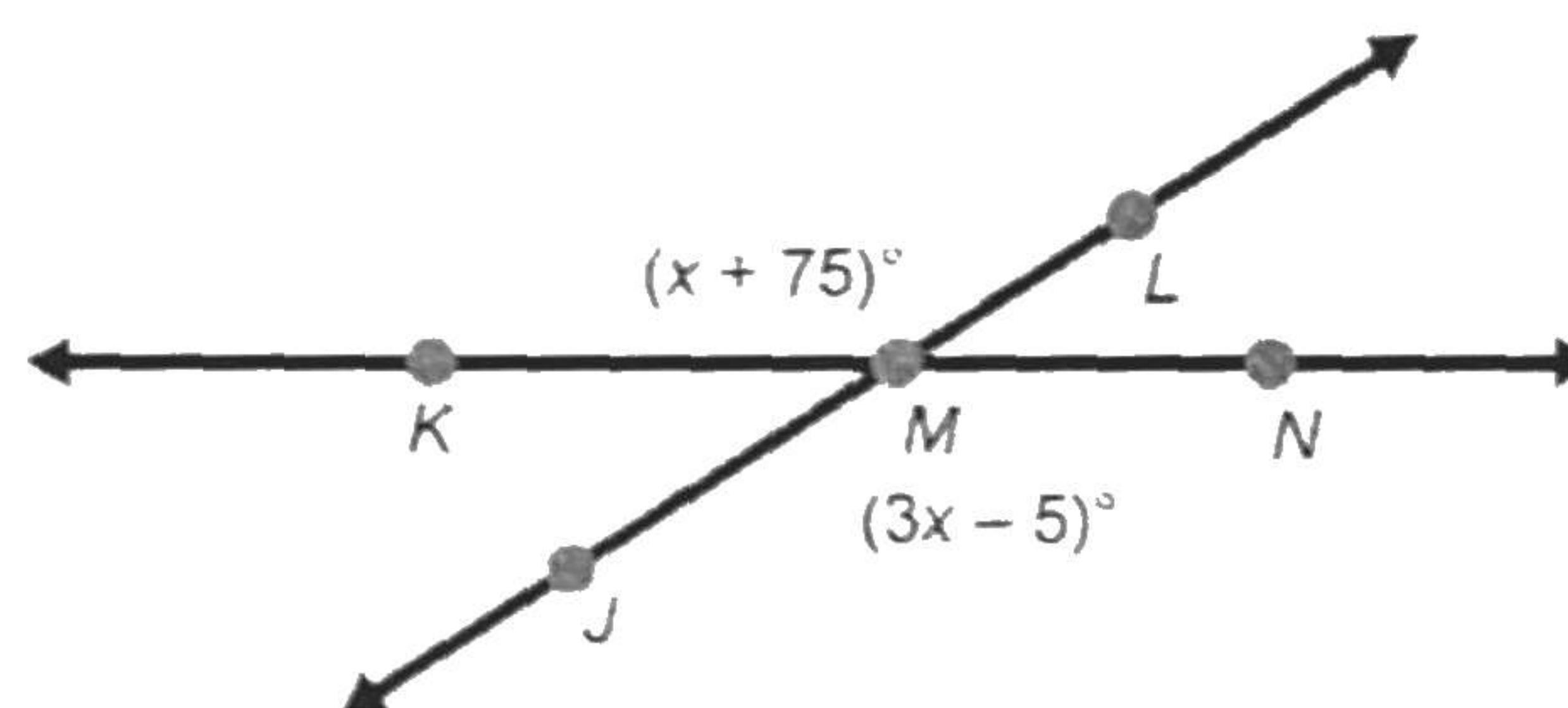
1. What term describes the pair of angles?

- A. vertical
- B. complementary
- C. parallel
- D. supplementary



2. What is $m\angle LMN$?

- A. 65°
- B. 80°
- C. 115°
- D. 180°



3. Angles A and B are complementary. If $m\angle A$ is 18° , what is $m\angle B$?

- A. 18°
- B. 32°
- C. 72°
- D. 162°

4. Angles Y and Z are supplementary. If $m\angle Y$ is 65° , which of the following is $m\angle Z$?

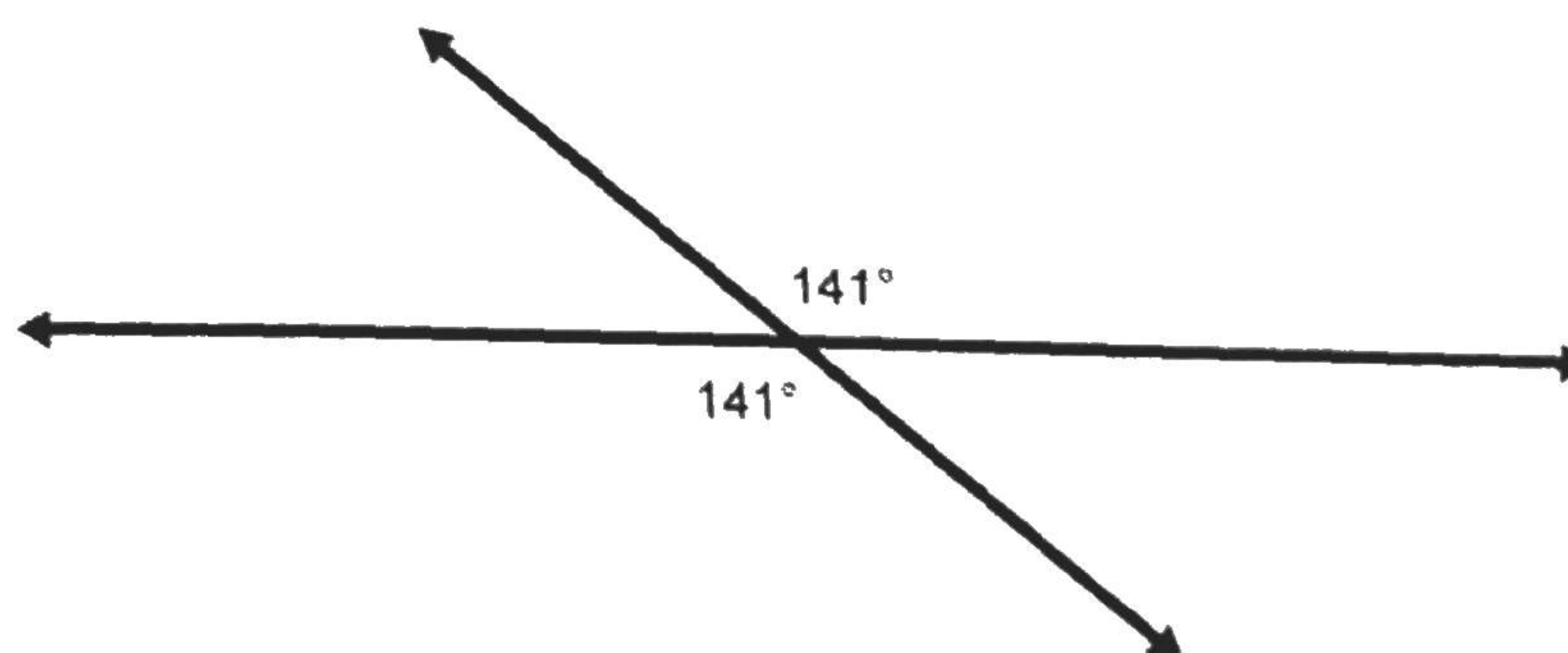
- A. 125°
- B. 115°
- C. 65°
- D. 25°

5. If $\angle R$ and $\angle S$ are supplementary, $m\angle R = 2x^\circ$, and $m\angle S = 18x^\circ$, what is the measure of the smaller angle?

- A. 9°
- B. 18°
- C. 20°
- D. 36°

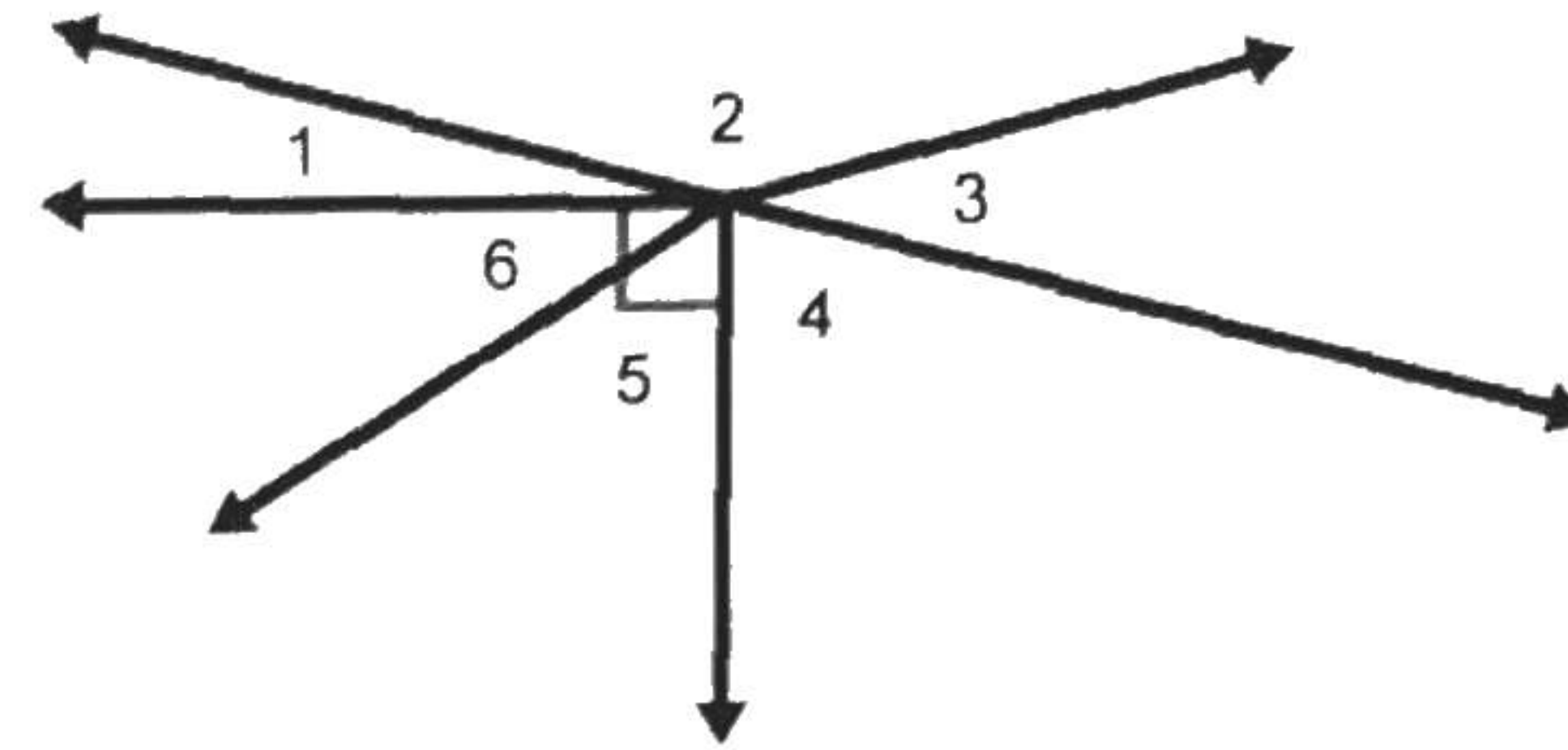
6. Which term describes the pair of labeled angles?

- A. complementary
- B. vertical
- C. supplementary
- D. adjacent

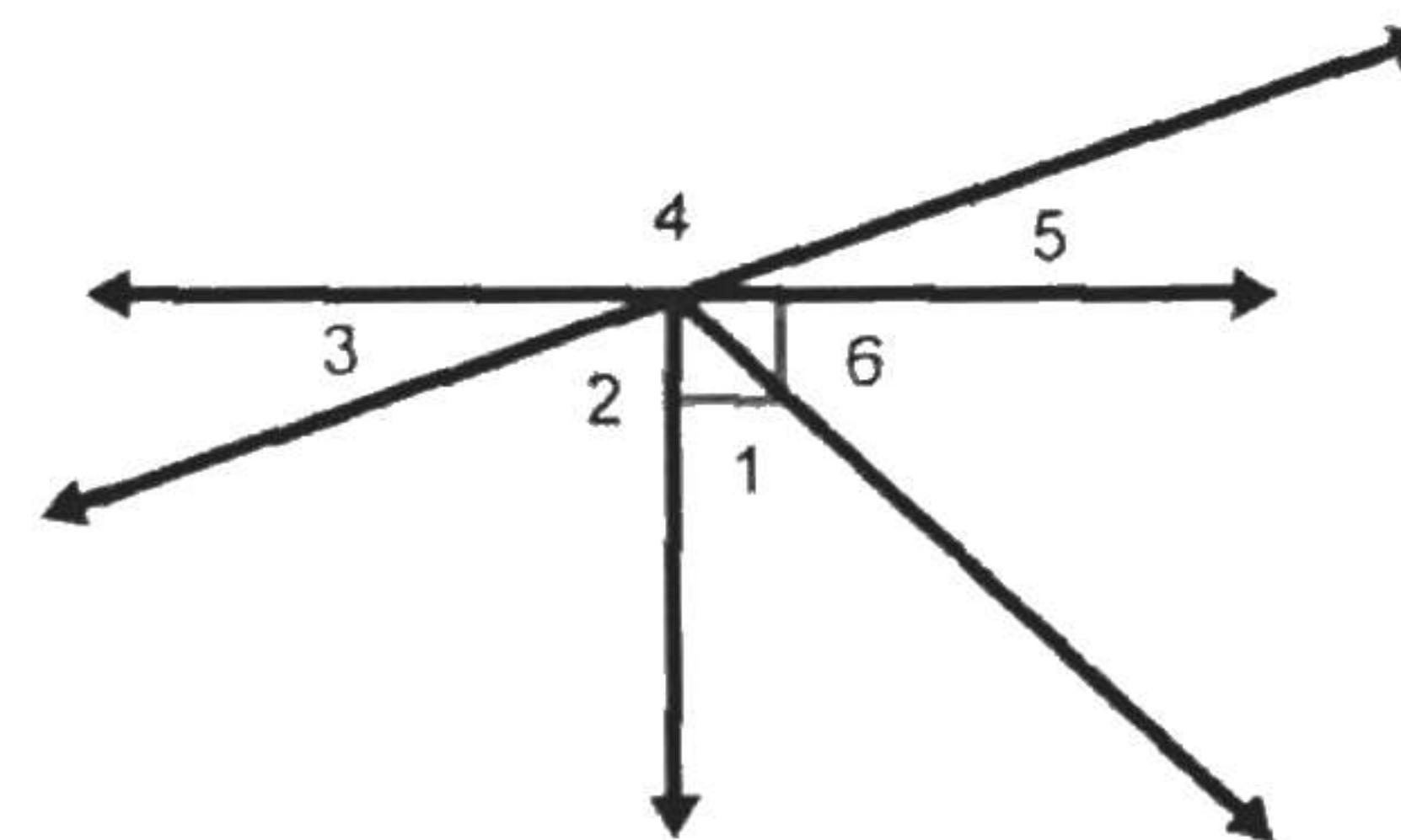


7. If $\angle F$ and $\angle G$ are complementary, $m\angle F = 5x^\circ$, and $m\angle G = x^\circ$, what is the value of x ?
- A. 90 B. 75 C. 15 D. 5
8. If $\angle M$ and $\angle P$ are supplementary, $m\angle M = 6x + 10$, and $m\angle P = 15x + 23$, which of the following is the measure of $\angle M$?
- A. 7° B. 52° C. 128° D. 147°

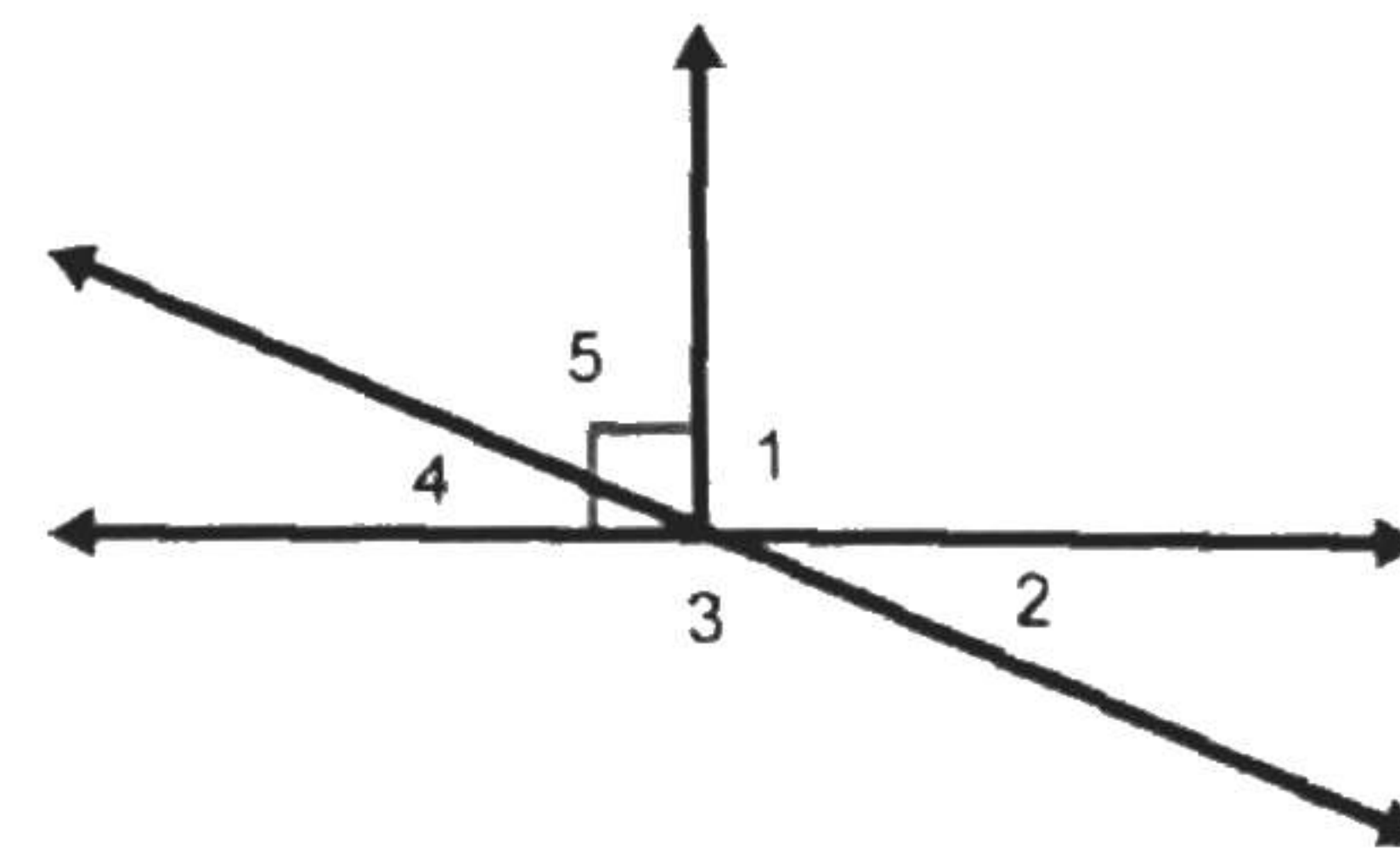
9. Which of the following pairs of angles is both adjacent and supplementary?
- A. $\angle 5$ and $\angle 6$ B. $\angle 1$ and $\angle 2$
 C. $\angle 1$ and $\angle 5$ D. $\angle 2$ and $\angle 3$



10. Which of the following pairs of angles is both adjacent and complementary?
- A. $\angle 1$ and $\angle 6$ B. $\angle 3$ and $\angle 5$
 C. $\angle 4$ and $\angle 5$ D. $\angle 1$ and $\angle 4$



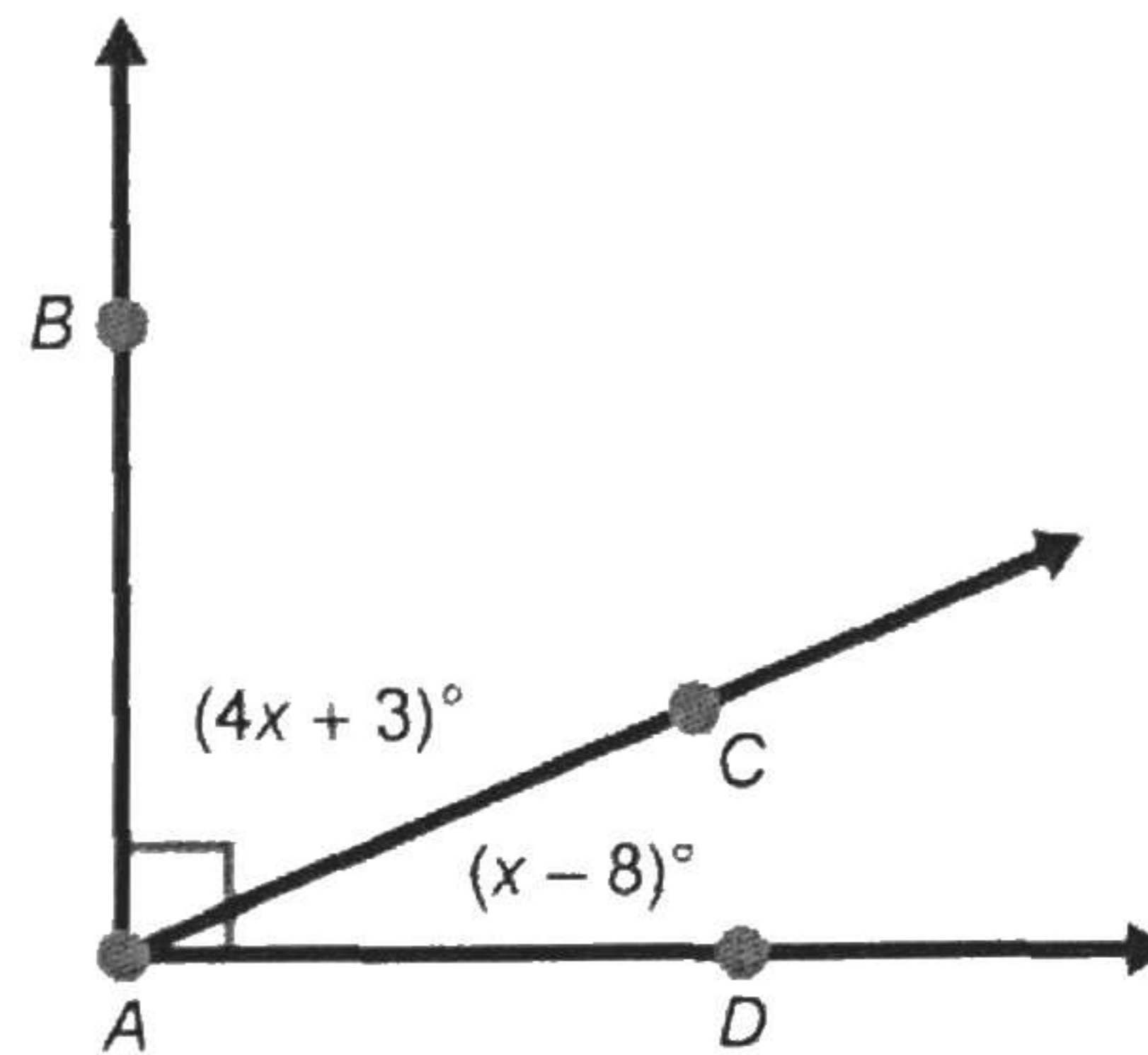
11. Which pair of angles listed below are adjacent?
- A. $\angle 1$ and $\angle 3$ B. $\angle 2$ and $\angle 4$
 C. $\angle 1$ and $\angle 2$ D. $\angle 2$ and $\angle 5$



12. Given: $m\angle A = 24^\circ$
 $\angle B$ and $\angle A$ are supplementary.
 $\angle C$ and $\angle A$ are complementary.
 $\angle D$ and $\angle C$ are complementary.
 Find: $m\angle B$, $m\angle C$, and $m\angle D$
- A. 156° , 66° , and 24° B. 156° , 64° , and 28°
 C. 66° , 114° , and 66° D. 156° , 24° , and 28°

13. Which of the following is $m\angle CAD$?

- A. 79°
- B. 19°
- C. 17°
- D. 11°

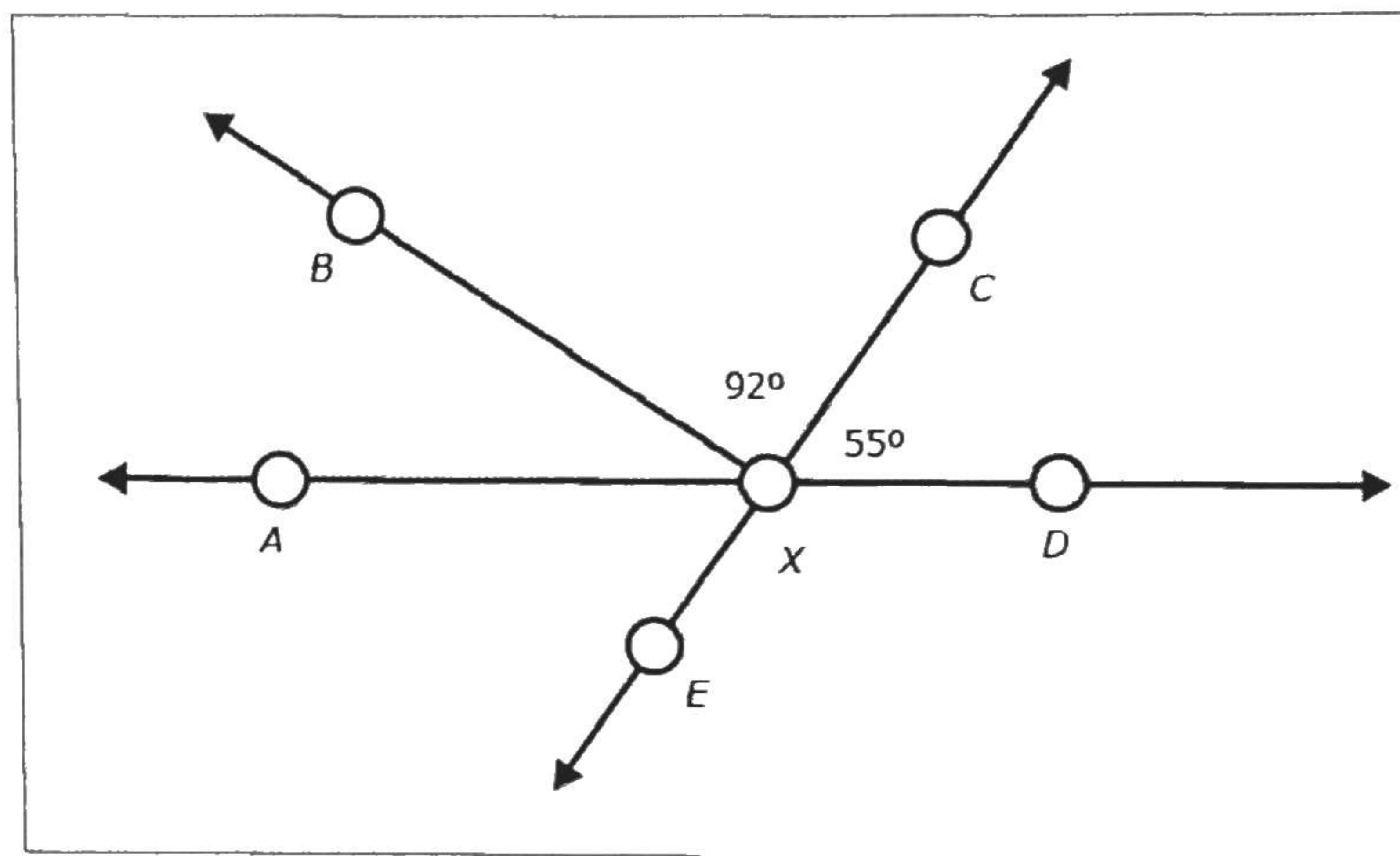


Questions 14 and 15 are fill-in-the-blank questions. Write the correct answers in the spaces provided on the answer sheet.

14. In the figure, point X lies on lines \overleftrightarrow{AD} and \overleftrightarrow{CE} .

What is the measure of $\angle AXB$?

$m\angle AXB =$ _____



15. Select the correct angle measures that are missing from the figure. Answers may be used more than once.

- A. 106°
- B. 84°
- C. 93°
- D. 90°
- E. 96°

(a) $x =$ _____

(b) $y =$ _____

(c) $z =$ _____

