RELATIONSHIPS BETWEEN ANGLES

A   COMPLEMENTARY AND SUPPLEMENTARY ANGLES

A.1 CALCULATING COMPLEMENTARY ANGLES

Ex 1: Calculate the complementary angle to 63°.

Complementary angle = ☐ °

Ex 2: Calculate the complementary angle to 87°.

Complementary angle = ☐ °
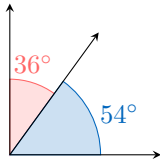
Ex 3: Calculate the complementary angle to 72°.

Complementary angle = ☐ °

Ex 4: Calculate the complementary angle to 19°.

Complementary angle = ☐ °

A.2 VERIFYING COMPLEMENTARY ANGLES

MCQ 5: Are the angles 36° and 54° complementary?

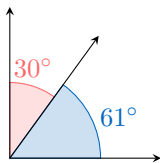**Choose one answer**

☐ Yes

☐ No

MCQ 6: Are the angles 30° and 61° complementary?

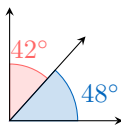**Choose one answer**

☐ Yes

☐ No

MCQ 7: Are the angles 42° and 48° complementary?

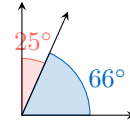**Choose one answer**

☐ Yes

☐ No

MCQ 8: Are the angles 25° and 66° complementary?

Choose one answer

☐ Yes

☐ No

A.3 CALCULATING SUPPLEMENTARY ANGLES

Ex 9: Calculate the supplementary angle to 115°.

Supplementary angle = ☐ °

Ex 10: Calculate the supplementary angle to 168°.

Supplementary angle = ☐ °
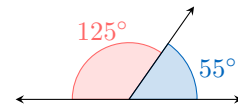
Ex 11: Calculate the supplementary angle to 132°.

Supplementary angle = ☐ °

Ex 12: Calculate the supplementary angle to 47°.

Supplementary angle = ☐ °

A.4 VERIFYING SUPPLEMENTARY ANGLES

MCQ 13: Are the angles 125° and 55° supplementary?

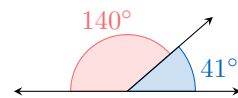**Choose one answer**

☐ Yes

☐ No

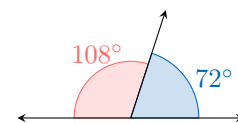**MCQ 14:** Are the angles 140° and 41° supplementary?

Choose one answer

☐ Yes

☐ No

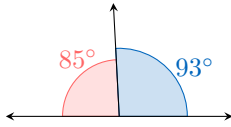**MCQ 15:** Are the angles 108° and 72° supplementary?

Choose one answer

☐ Yes

☐ No

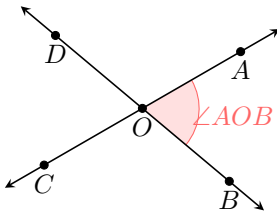**MCQ 16:** Are the angles 85° and 93° supplementary?

Choose one answer

☐ Yes

☐ No

B OPPOSITE ANGLES AT A VERTEX

B.1 IDENTIFYING OPPOSITE ANGLES AT A VERTEX

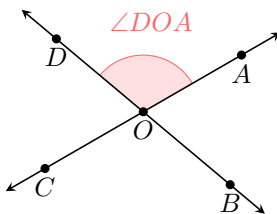**MCQ 17:** Identify the angle opposite ∠AOB at the vertex.

Choose one answer

☐ ∠DOA

☐ ∠COB

☐ ∠DOC

☐ ∠AOD

MCQ 18: Identify the angle opposite ∠DOA at the vertex.

Choose one answer

☐ ∠DOA

☐ ∠COB

☐ ∠DOC

☐ ∠AOD

MCQ 19: Identify the angle opposite ∠BOC at the vertex.
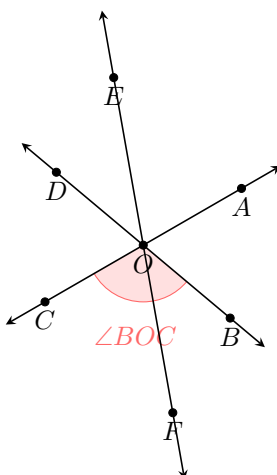
Choose one answer

☐ ∠DOC
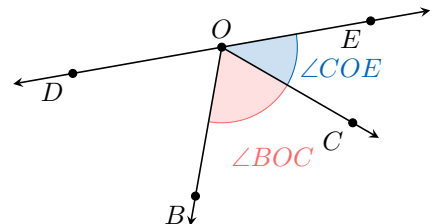
☐ ∠DOE

☐ ∠EOA

☐ ∠AOD

B.2 DETERMINING ANGLE RELATIONSHIPS

MCQ 20: Which relationship describes ∠BOC and ∠COE?
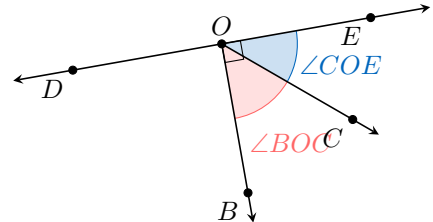
Choose one answer

☐ Opposite angles at a vertex

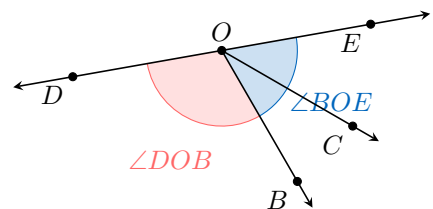☐ Complementary angles

☐ Supplementary angles

☐ None of the above

MCQ 21: Which relationship describes ∠BOC and ∠COE?

Choose one answer

☐ Opposite angles at a vertex

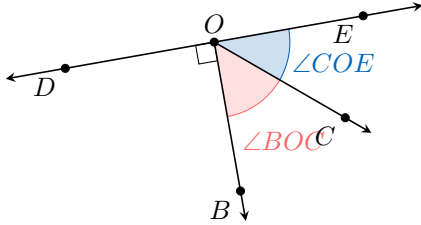☐ Complementary angles

☐ Supplementary angles

☐ None of the above

MCQ 22: Which relationship describes ∠DOB and ∠BOE?

Choose one answer

☐ Opposite angles at a vertex

☐ Complementary angles

☐ Supplementary angles

☐ None of the above

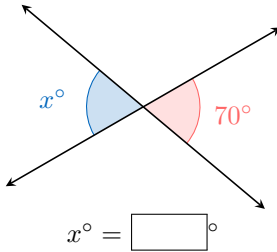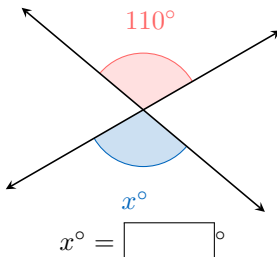**MCQ 23:** Which relationship describes ∠*BOC* and ∠*COE*?

Choose one answer

☐ Opposite angles at a vertex

☐ Complementary angles

☐ Supplementary angles
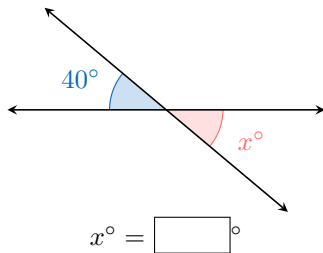
☐ None of the above

B.3 CALCULATING UNKNOWN ANGLES

Ex 24: Find the measure of the unknown angle $x°$.

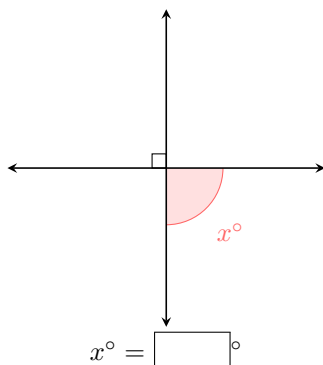$$x° = \boxed{}°$$

Ex 25: Find the measure of the unknown angle $x°$.

$$x° = \boxed{}°$$

Ex 26: Find the measure of the unknown angle $x°$.

$$x° = \boxed{}°$$

Ex 27: Find the measure of the unknown angle $x°$.

$$x° = \boxed{}°$$

Ex 28: Find the measure of the unknown angle $x°$.

$$x° = \boxed{}°$$
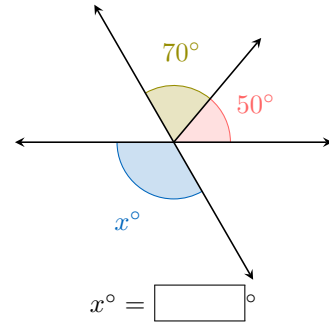
Ex 29: Find the measure of the unknown angle $x°$.

$$x° = \boxed{}°$$
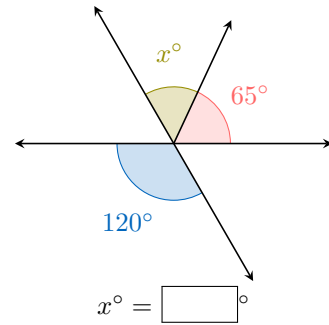
Ex 30: Find the measure of the unknown angle $x°$.

$$x° = \boxed{}°$$
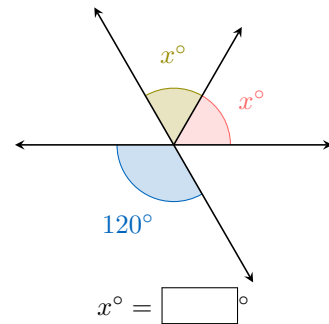
C   CORRESPONDING, ALTERNATE, AND CO-INTERIOR ANGLES

C.1 IDENTIFYING ANGLES

MCQ 31: Identify the corresponding angle to ∠*BAE*.
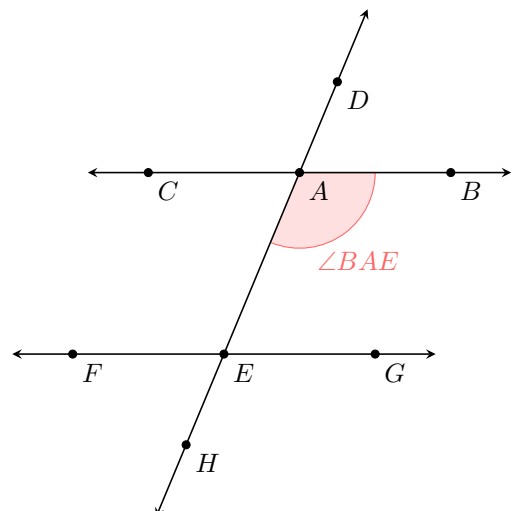
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 32: Identify the alternate angle to ∠BAE.

∠BAE
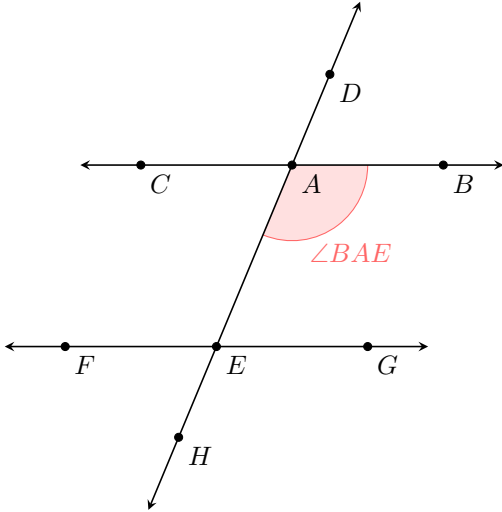
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 33: Identify the co-interior angle to ∠BAE.

∠BAE
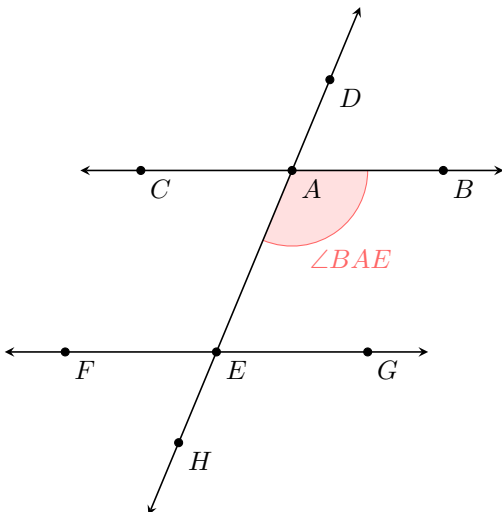
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 34: Identify the opposite angle to ∠BAE.

∠BAE
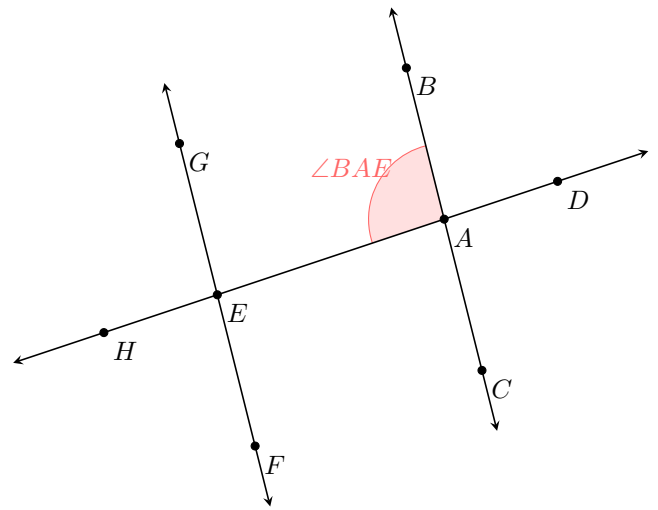
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 35: Identify the corresponding angle to ∠BAE.

∠BAE
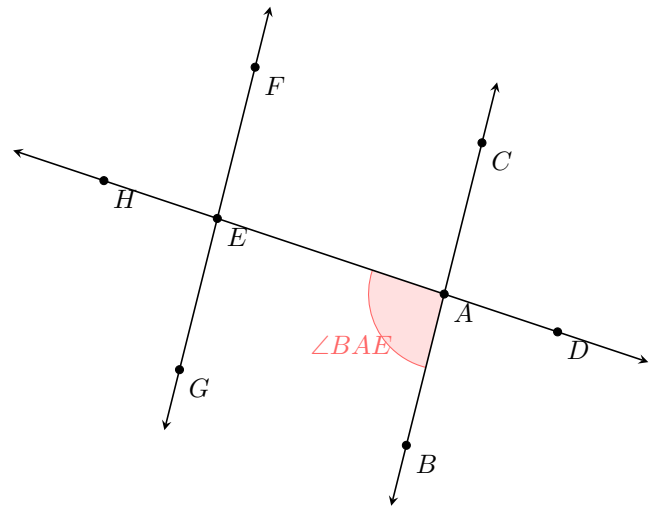
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 36: Identify the alternate angle to ∠BAE.
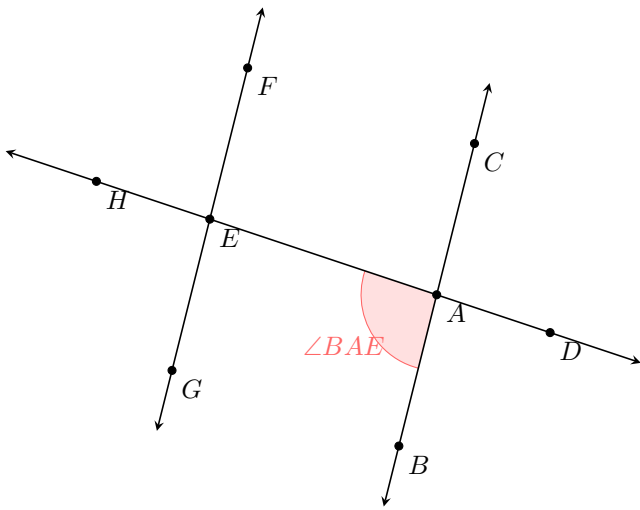
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 37: Identify the co-interior angle to ∠BAE.

Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

MCQ 38: Identify the opposite angle to ∠BAE.
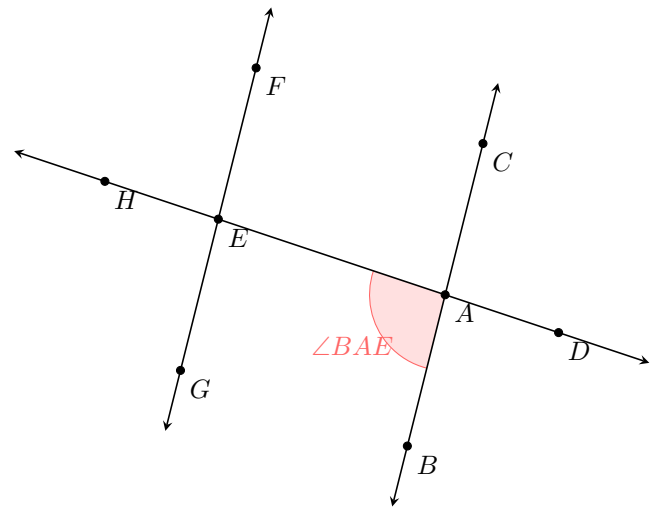
Choose one answer

□ ∠CAD

□ ∠FEA

□ ∠AEG

□ ∠GEH

D PROPERTIES OF PARALLEL LINES

D.1 CALCULATING UNKNOWN ANGLES: LEVEL 1
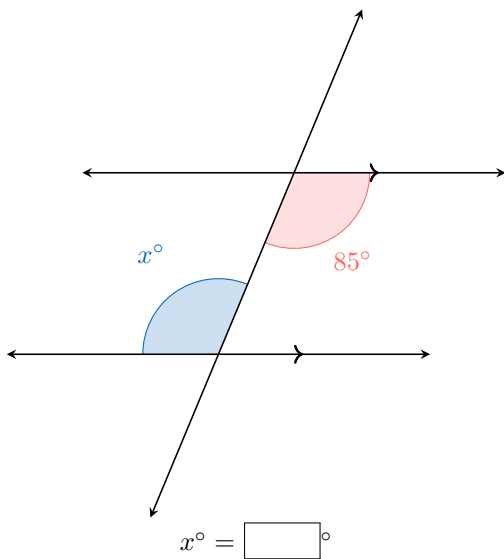
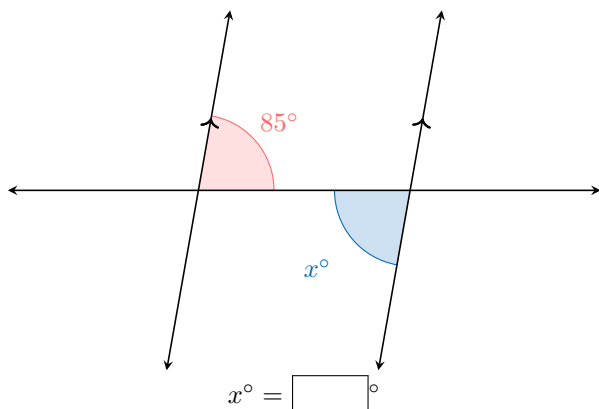**Ex 39:** Find the measure of the unknown angle $x°$.

$$70°$$

$$x°$$

$x° = \boxed{}°$

Ex 40: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$

Ex 41: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$

Ex 42: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$
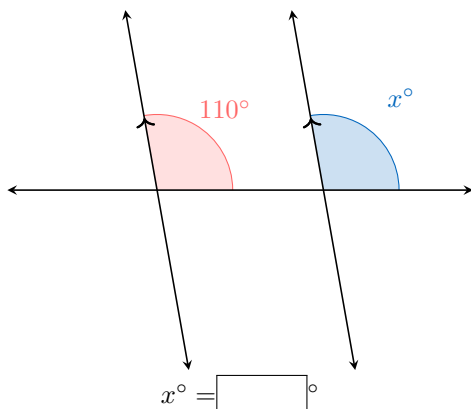
D.2 CALCULATING UNKNOWN ANGLES: LEVEL 2

Ex 43: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$
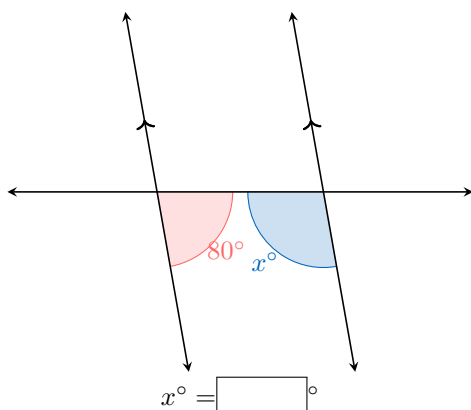
Ex 44: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$
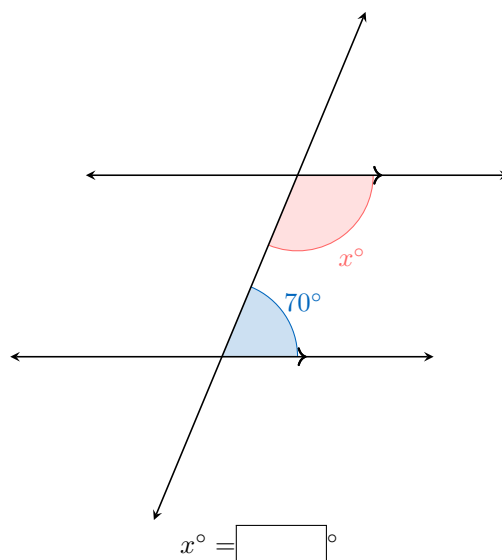
Ex 45: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$
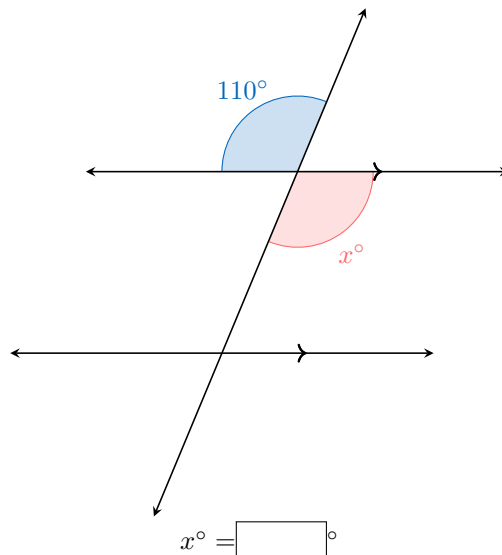
Ex 46: Find the measure of the unknown angle $x°$.

$x° = \boxed{}°$
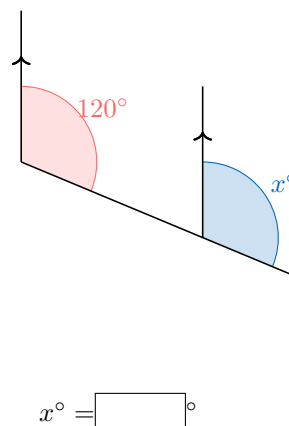
Ex 47: Find the measure of the unknown angle $x°$.

$x° = $ ⬚ °
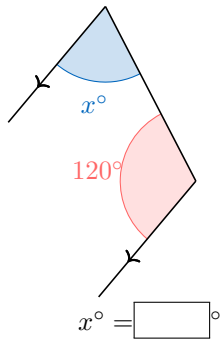
Ex 48: Find the measure of the unknown angle $x°$.

$x° = $ ⬚ °
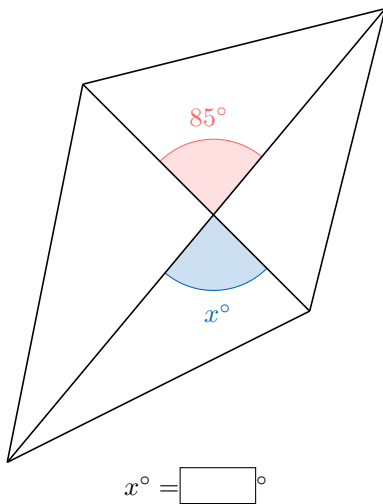
Ex 49: Find the measure of the unknown angle $x°$.

$x° = $ ⬚ °

Ex 50: Find the measure of the unknown angle $x°$.

$x° = $ ⬚ °