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°.

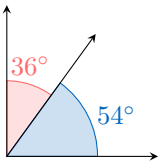
Complementary angle = ☐°

Ex 4: Calculate the complementary angle to 19°.

Complementary angle = ☐°

A.2 VERIFYING COMPLEMENTARY ANGLES

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

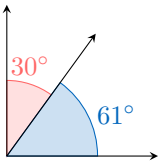


Choose one answer

☐ Yes

☐ No

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

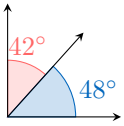


Choose one answer

☐ Yes

☐ No

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

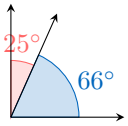


Choose one answer

☐ 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°.

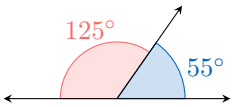
Supplementary angle = ☐°

Ex 12: Calculate the supplementary angle to 47°.

Supplementary angle = ☐°

A.4 VERIFYING SUPPLEMENTARY ANGLES

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

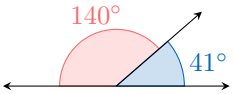


Choose one answer

☐ Yes

☐ No

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

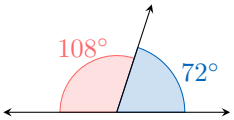


Choose one answer

☐ Yes

☐ No

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

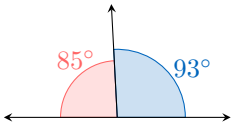


Choose one answer

☐ Yes

☐ No

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



Choose one answer

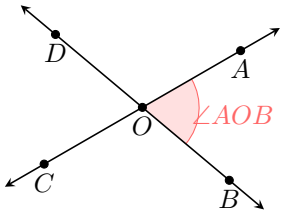
☐ Yes

☐ No

B OPPOSITE ANGLES AT A VERTEX

B.1 IDENTIFYING OPPOSITE ANGLES AT A VERTEX

MCQ 17: Identify the angle opposite $\angle AOB$ at the vertex.



Choose one answer

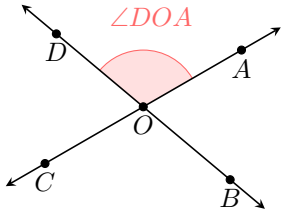
☐ $\angle DOA$

☐ $\angle COB$

☐ $\angle DOC$

☐ $\angle AOD$

MCQ 18: Identify the angle opposite $\angle DOA$ at the vertex.



Choose one answer

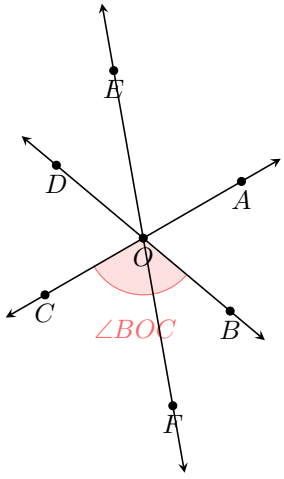
☐ $\angle DOA$

☐ $\angle COB$

☐ $\angle DOC$

☐ $\angle AOD$

MCQ 19: Identify the angle opposite $\angle BOC$ at the vertex.



Choose one answer

☐ $\angle DOA$

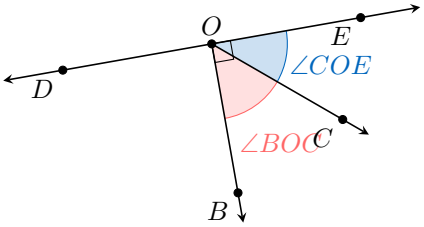
☐ $\angle DOE$

☐ $\angle EOA$

☐ $\angle AOD$

B.2 DETERMINING ANGLE RELATIONSHIPS

MCQ 20: Which relationship describes $\angle BOC$ and $\angle COE$?



Choose one answer

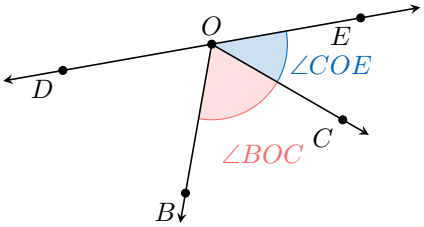
☐ Opposite angles at a vertex

☐ Complementary angles

☐ Supplementary angles

☐ None of the above

MCQ 21: Which relationship describes $\angle BOC$ and $\angle COE$?



Choose one answer

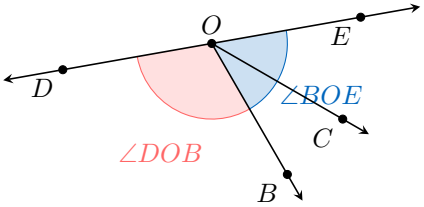
☐ Opposite angles at a vertex

☐ Complementary angles

☐ Supplementary angles

☐ None of the above

MCQ 22: Which relationship describes $\angle DOB$ and $\angle BOE$?



Choose one answer

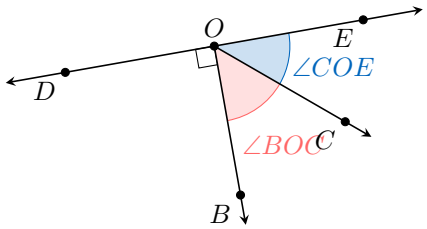
☐ Opposite angles at a vertex

☐ Complementary angles

☐ Supplementary angles

☐ None of the above

MCQ 23: Which relationship describes $\angle BOC$ and $\angle COE$?

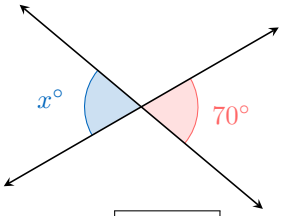


Choose one answer

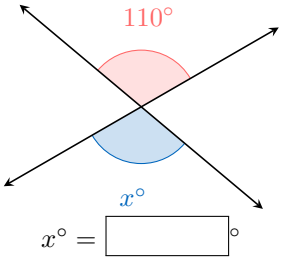
- ☐ Opposite angles at a vertex
- ☐ Complementary angles
- ☐ Supplementary angles
- ☐ None of the above

B.3 CALCULATING UNKNOWN ANGLES

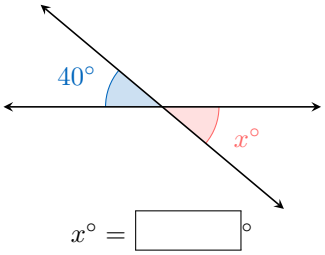
Ex 24: Find the measure of the unknown angle $x°$.



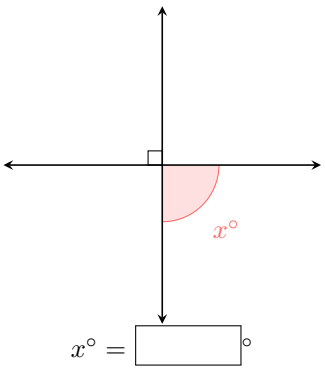
Ex 25: Find the measure of the unknown angle $x°$.



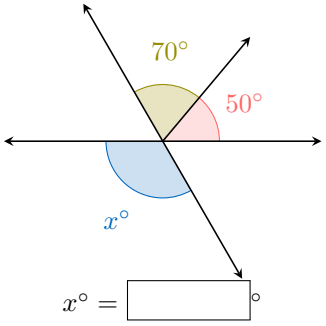
Ex 26: Find the measure of the unknown angle $x°$.



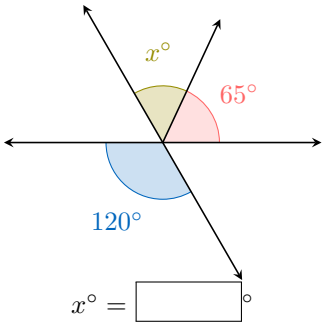
Ex 27: Find the measure of the unknown angle $x°$.



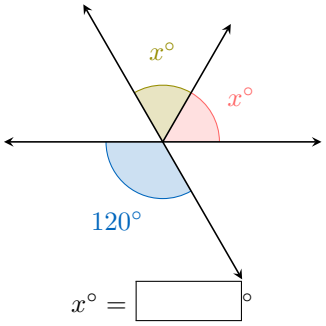
Ex 28: Find the measure of the unknown angle $x°$.



Ex 29: Find the measure of the unknown angle $x°$.



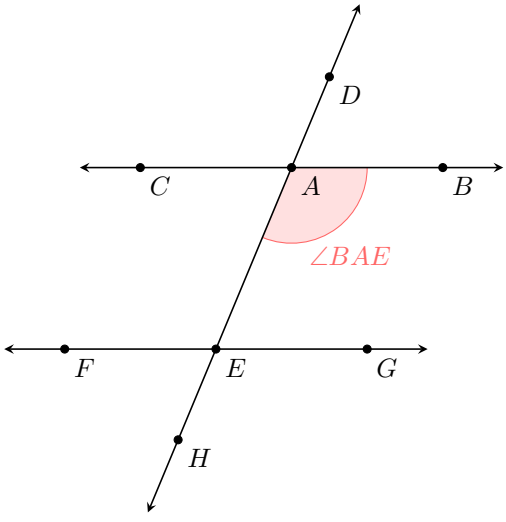
Ex 30: Find the measure of the unknown angle $x°$.



C CORRESPONDING, ALTERNATE, AND CO-INTERIOR ANGLES

C.1 IDENTIFYING ANGLES

MCQ 31: Identify the corresponding angle to $\angle BAE$.



Choose one answer

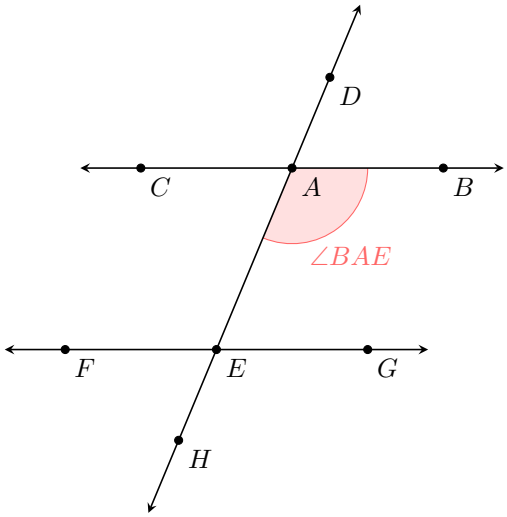
☐ $\angle CAD$

☐ $\angle FEA$

☐ $\angle AEG$

☐ $\angle GEH$

MCQ 32: Identify the alternate angle to $\angle BAE$.



Choose one answer

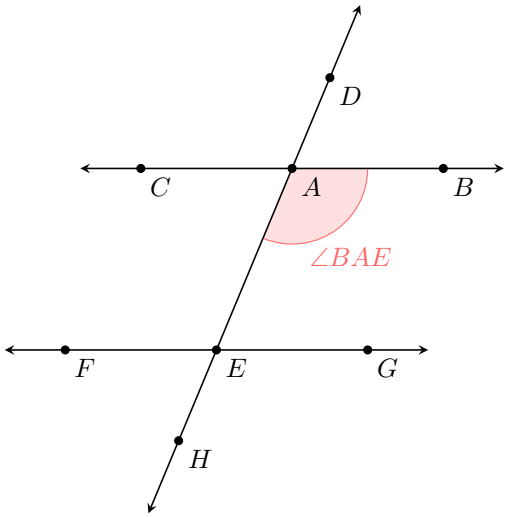
☐ $\angle CAD$

☐ $\angle FEA$

☐ $\angle AEG$

☐ $\angle GEH$

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



Choose one answer

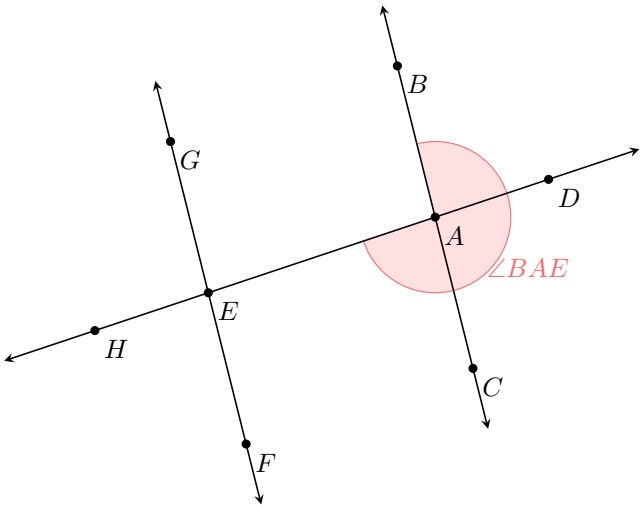
☐ $\angle CAD$

☐ $\angle FEA$

☐ $\angle AEG$

☐ $\angle GEH$

MCQ 34: Identify the opposite angle to $\angle BAE$.



Choose one answer

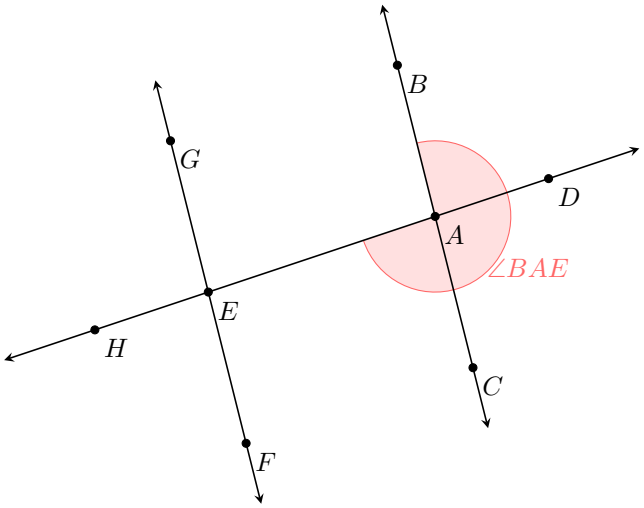
☐ $\angle CAD$

☐ $\angle FEA$

☐ $\angle AEG$

☐ $\angle GEH$

MCQ 35: Identify the corresponding angle to $\angle BAE$.



Choose one answer

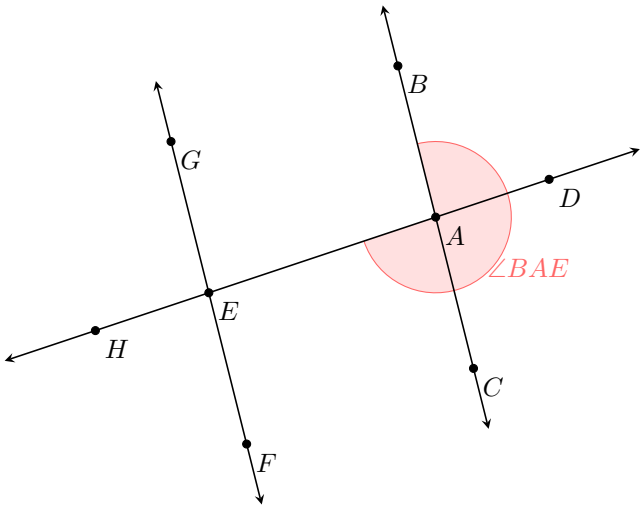
☐ $\angle CAD$

☐ $\angle FEA$

☐ $\angle AEG$

☐ $\angle GEH$

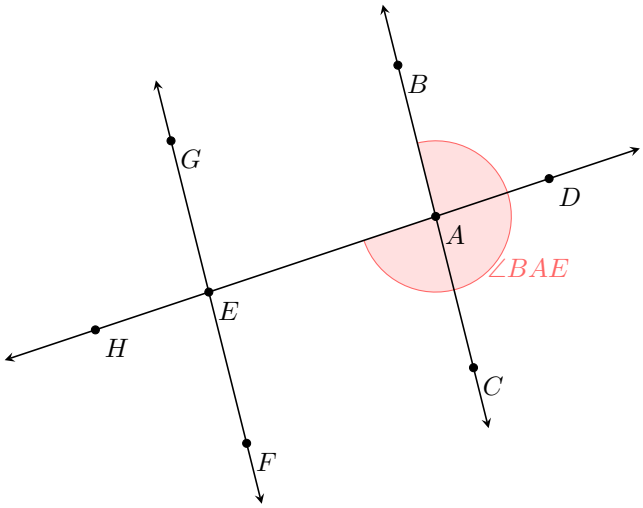
MCQ 36: Identify the alternate angle to $\angle BAE$.



Choose one answer

- ☐ $\angle CAD$
- ☐ $\angle FEA$
- ☐ $\angle AEG$
- ☐ $\angle GEH$

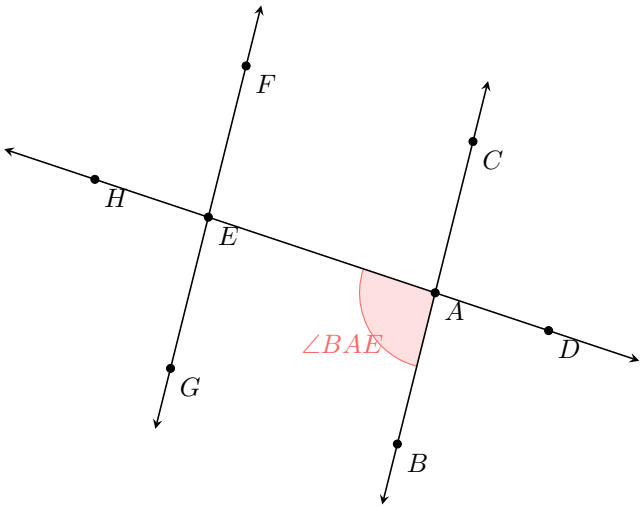
MCQ 37: Identify the co-interior angle to $\angle BAE$.



Choose one answer

- ☐ $\angle CAD$
- ☐ $\angle FEA$
- ☐ $\angle AEG$
- ☐ $\angle GEH$

MCQ 38: Identify the opposite angle to $\angle BAE$.



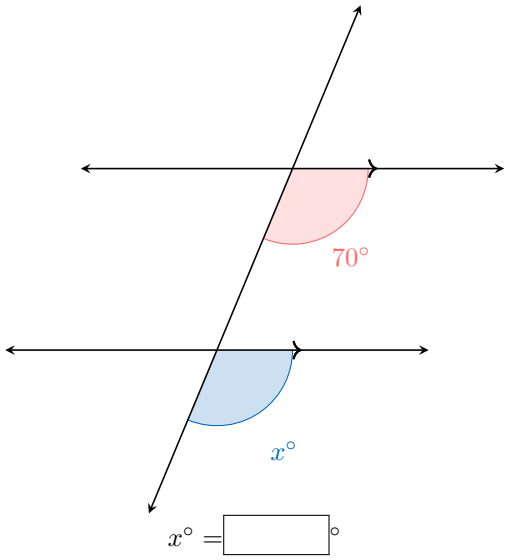
Choose one answer

- ☐ $\angle CAD$
- ☐ $\angle FEA$
- ☐ $\angle AEG$
- ☐ $\angle GEH$

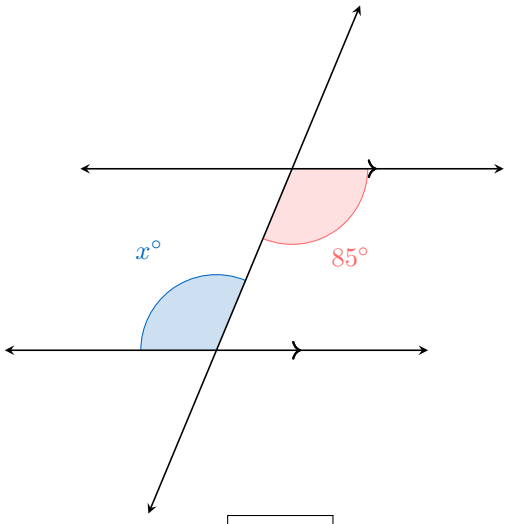
D PROPERTIES OF PARALLEL LINES

D.1 CALCULATING UNKNOWN ANGLES

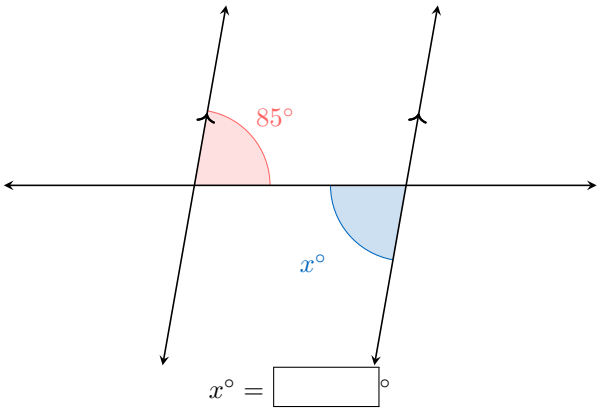
Ex 39: Find the measure of the unknown angle $x°$.



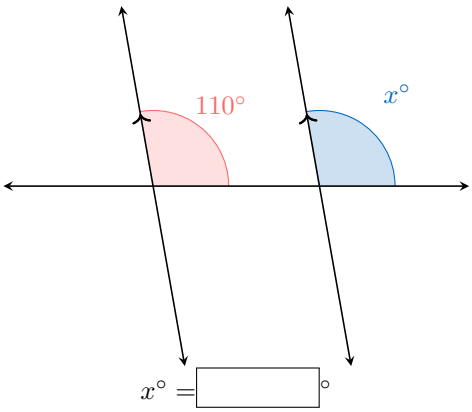
Ex 40: Find the measure of the unknown angle $x°$.



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

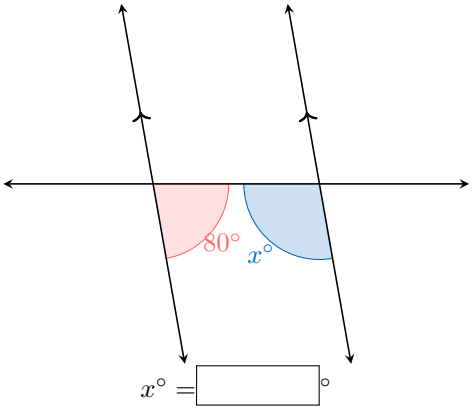


Ex 42: Find the measure of the unknown angle $x°$.

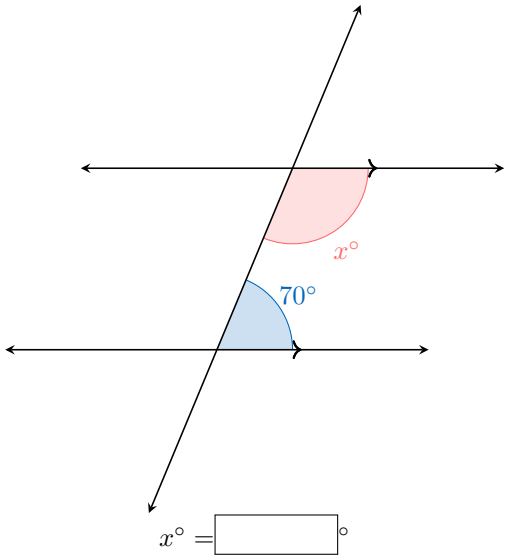


D.2 CALCULATING UNKNOWN ANGLES 2

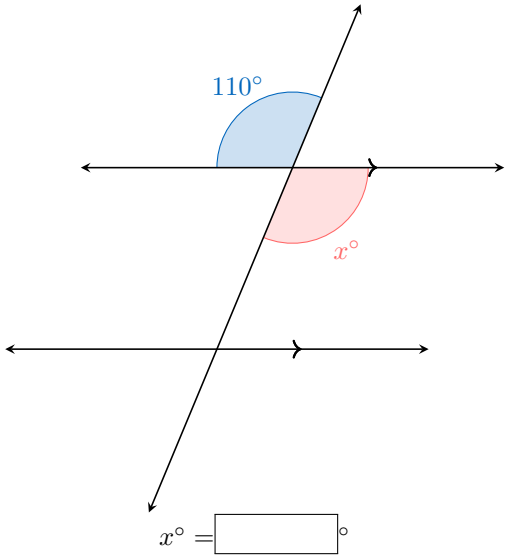
Ex 43: Find the measure of the unknown angle $x°$.



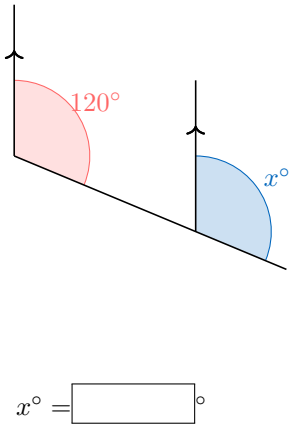
Ex 44: Find the measure of the unknown angle $x°$.



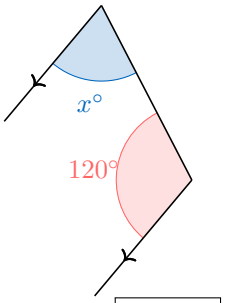
Ex 45: Find the measure of the unknown angle $x°$.



Ex 46: Find the measure of the unknown angle $x°$.

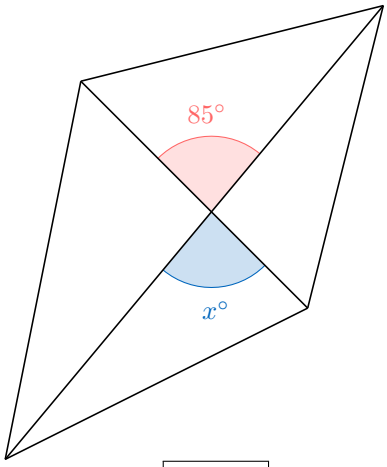


Ex 47: Find the measure of the unknown angle $x°$.



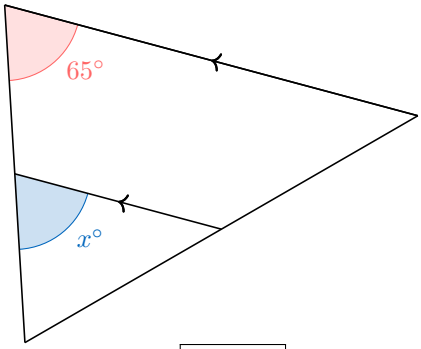
$x° =$ ☐ °

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



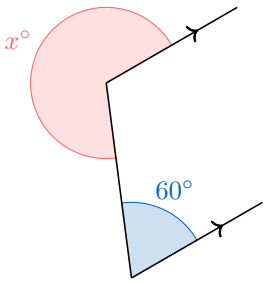
$x° =$ ☐ °

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



$x° =$ ☐ °

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



$x° =$ ☐ °