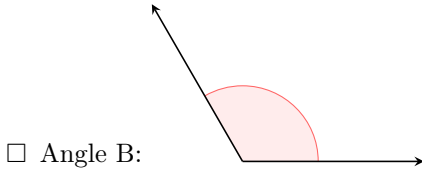
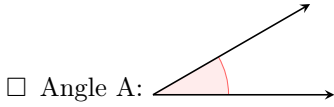


ANGLES

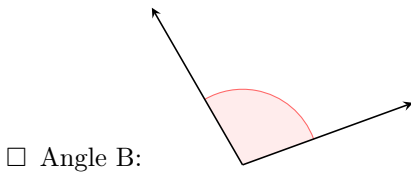
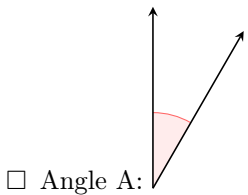
A DEFINITIONS

A.1 COMPARING ANGLES

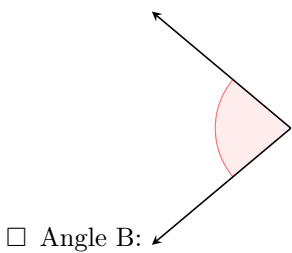
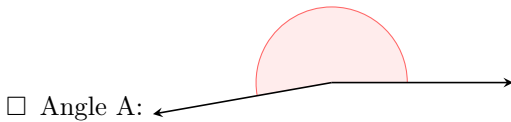
MCQ 1: Which angle has the greater measure?



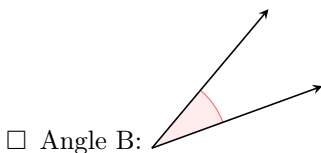
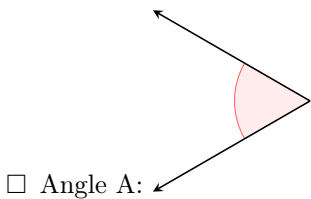
MCQ 2: Which angle has the greater measure?



MCQ 3: Which angle has the greater measure?

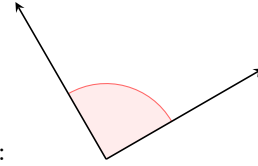


MCQ 4: Which angle has the greater measure?

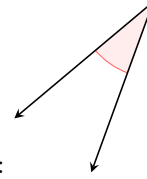


MCQ 5: Which angle has the greater measure?

☐ Angle A:

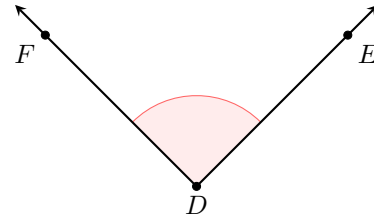


☐ Angle B:



A.2 NAMING ANGLES WITH THREE POINTS

MCQ 6: Which option correctly names the marked angle using three-point notation?

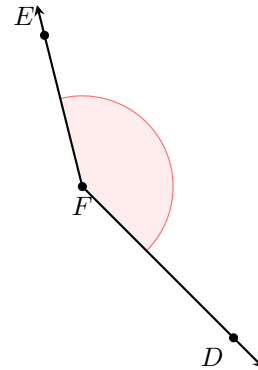


☐ $\angle DEF$

☐ $\angle FDE$

☐ $\angle DFE$

MCQ 7: Which option correctly names the marked angle using three-point notation?

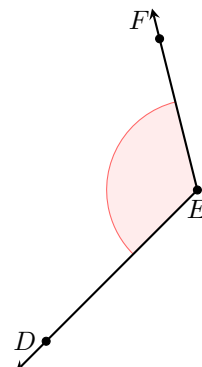


☐ $\angle DEF$

☐ $\angle FDE$

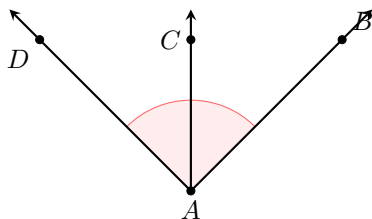
☐ $\angle DFE$

MCQ 8: Which option correctly names the marked angle using three-point notation?



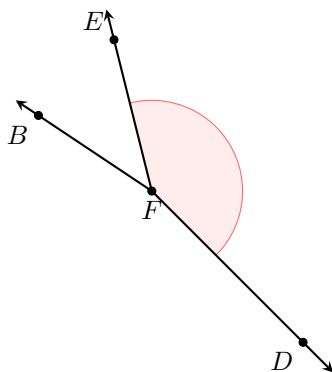
- ☐ $\angle DEF$
- ☐ $\angle FDE$
- ☐ $\angle DFE$

MCQ 9: Which option correctly names the marked angle using three-point notation?



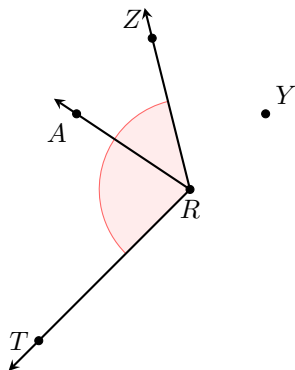
- ☐ $\angle ADC$
- ☐ $\angle CAB$
- ☐ $\angle DAB$
- ☐ $\angle DAC$

MCQ 10: Which option correctly names the marked angle using three-point notation?



- ☐ $\angle BFD$
- ☐ $\angle FDE$
- ☐ $\angle DFE$
- ☐ $\angle BFE$


MCQ 11: Which option correctly names the marked angle using three-point notation?

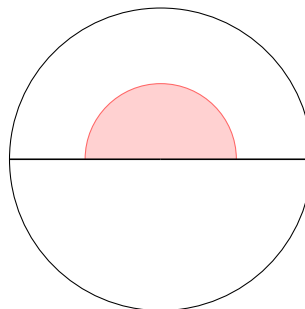


- ☐ $\angle TRY$
- ☐ $\angle ZRT$
- ☐ $\angle ZRA$
- ☐ $\angle RZT$


B DEGREES

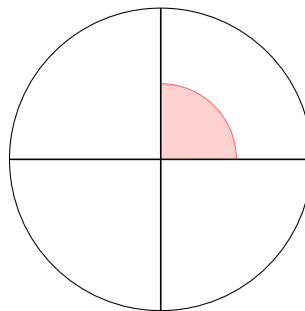
B.1 DIVIDING THE FULL TURN

Ex 12: 




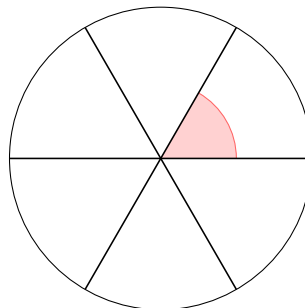
One-half of a full turn measures °.

Ex 13: 




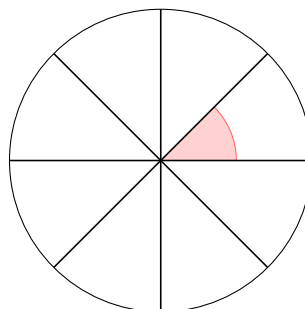
One-quarter of a full turn measures °.

Ex 14: 



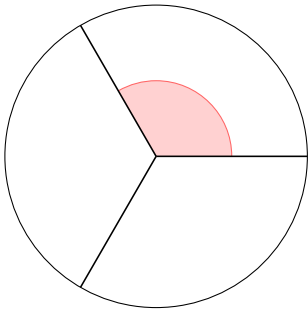
One-sixth of a full turn measures °.

Ex 15: 



One-eighth of a full turn measures °.

Ex 16:

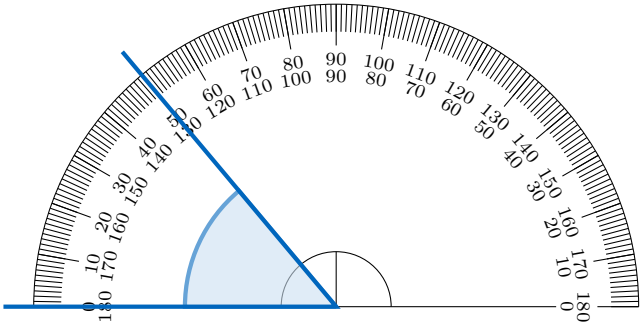


One-third of a full turn measures °.

C MEASURING AND DRAWING ANGLES WITH A PROTRACTOR

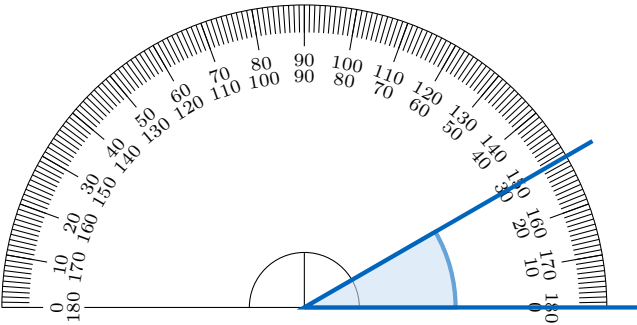
C.1 MEASURING ANGLES

Ex 17:



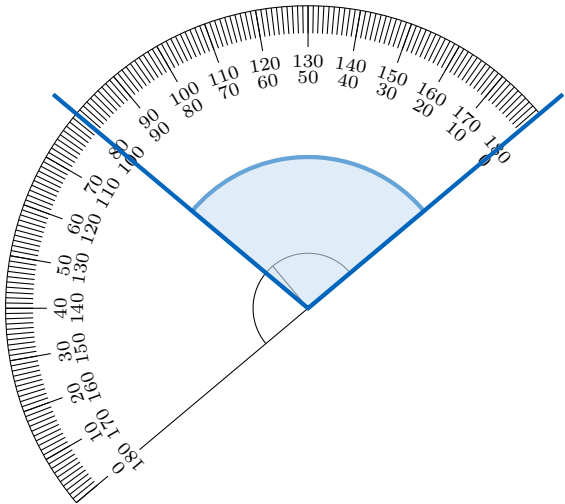
The angle shown measures °.

Ex 18:



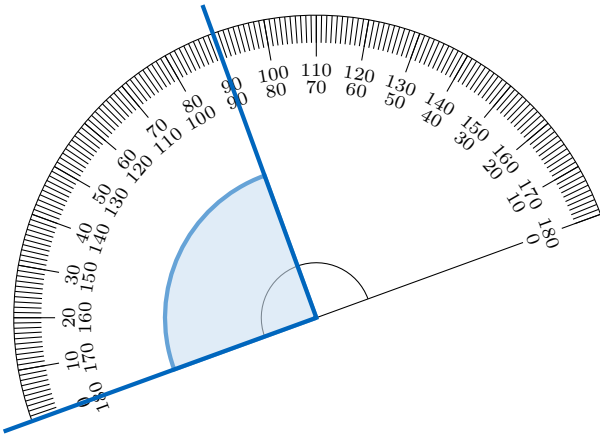
The angle shown measures °.

Ex 19:



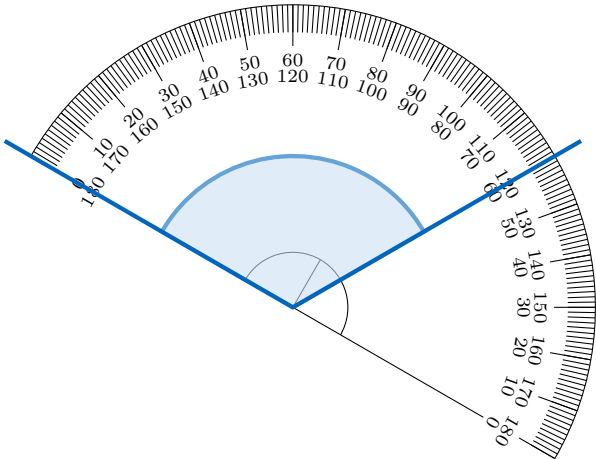
The angle shown measures °.

Ex 20:



The angle shown measures °.

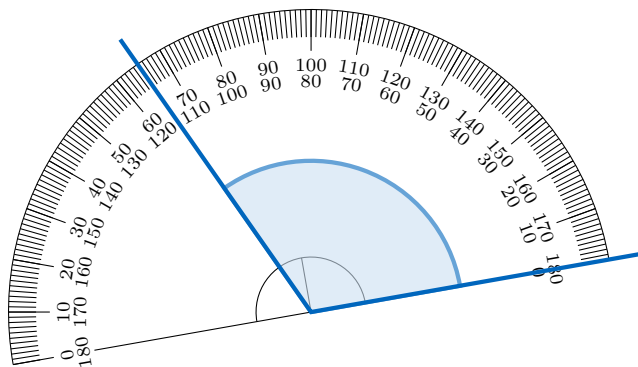
Ex 21:



The angle shown measures °.

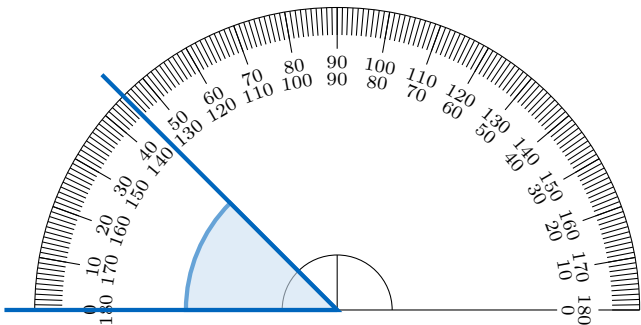
Ex 22:





The angle shown measures °.

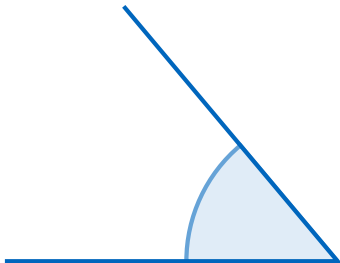
Ex 23:



The angle shown measures °.

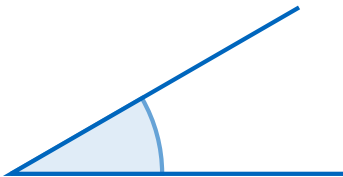
C.2 MEASURING ANGLES

MCQ 24: Using a protractor, find the measure of the angle shown.



- ☐ 30°
- ☐ 50°
- ☐ 90°
- ☐ 130°

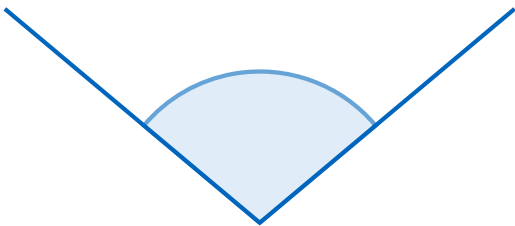
MCQ 25: Using a protractor, find the measure of the angle shown.



- ☐ 30°
- ☐ 50°
- ☐ 90°

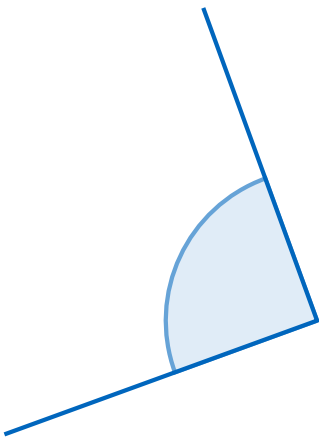
☐ 130°

MCQ 26: Using a protractor, find the measure of the angle shown.



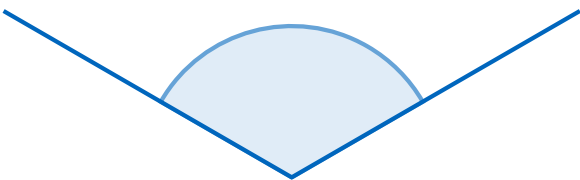
- ☐ 30°
- ☐ 50°
- ☐ 100°
- ☐ 130°

MCQ 27: Using a protractor, find the measure of the angle shown.



- ☐ 30°
- ☐ 50°
- ☐ 90°
- ☐ 130°

MCQ 28: Using a protractor, find the measure of the angle shown.



- ☐ 30°
- ☐ 50°
- ☐ 90°
- ☐ 120°

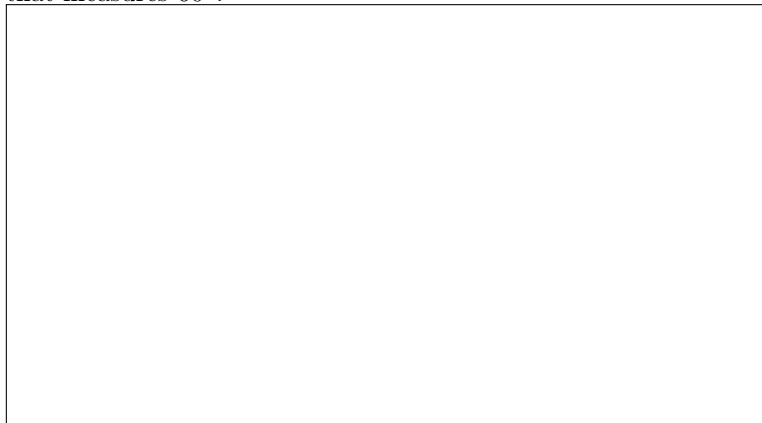


C.3 CONSTRUCTING ANGLES

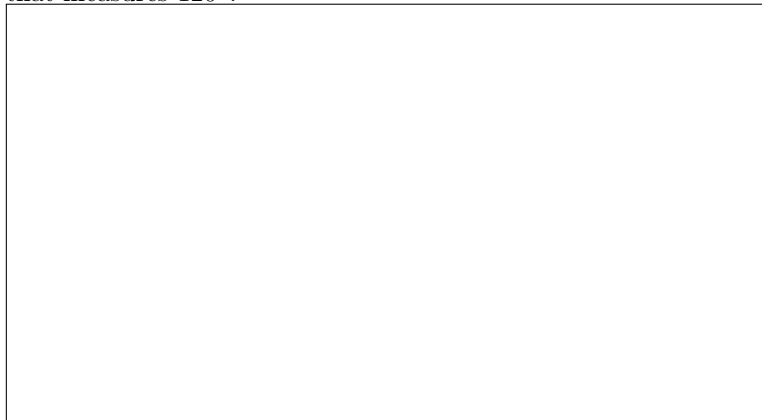
Ex 29: Using a pencil, a ruler, and a protractor, draw an angle that measures 90° .



Ex 30: Using a pencil, a ruler, and a protractor, draw an angle that measures 60° .



Ex 31: Using a pencil, a ruler, and a protractor, draw an angle that measures 120° .

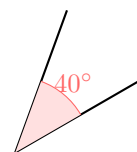


Ex 32: Using a pencil, a ruler, and a protractor, draw an angle that measures 45° .

D CLASSIFICATION OF ANGLES

D.1 IDENTIFYING ANGLE TYPES BY MEASURE

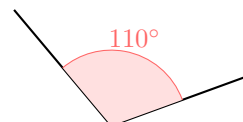
MCQ 33: What is the nature of the marked angle?



Choose one answer:

- ☐ Acute angle
- ☐ Right angle
- ☐ Obtuse angle
- ☐ Straight angle

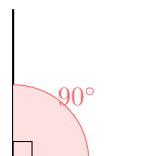
MCQ 34: What is the nature of the marked angle?



Choose one answer:

- ☐ Acute angle
- ☐ Right angle
- ☐ Obtuse angle
- ☐ Straight angle

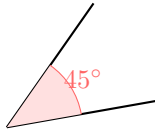
MCQ 35: What is the nature of the marked angle?



Choose one answer:

- ☐ Acute angle
- ☐ Right angle
- ☐ Obtuse angle
- ☐ Straight angle

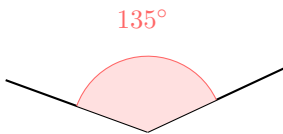
MCQ 36: What is the nature of the marked angle?



Choose one answer:

- ☐ Acute angle
- ☐ Right angle
- ☐ Obtuse angle
- ☐ Straight angle

MCQ 37: What is the nature of the marked angle?

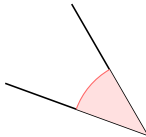


Choose one answer:

- ☐ Acute angle
- ☐ Right angle
- ☐ Obtuse angle
- ☐ Straight angle

D.2 IDENTIFYING ANGLE TYPES

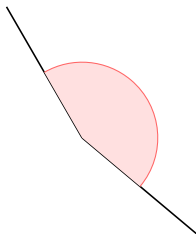
MCQ 38: Identify the type of the highlighted angle.



Choose one answer:

- ☐ acute angle
- ☐ right angle
- ☐ obtuse angle
- ☐ straight angle

MCQ 39: Identify the type of the highlighted angle.

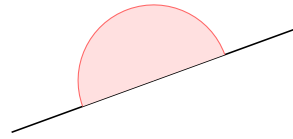


Choose one answer:

- ☐ acute angle
- ☐ right angle
- ☐ obtuse angle

☐ straight angle

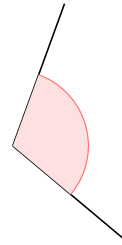
MCQ 40: Identify the type of the highlighted angle.



Choose one answer:

- ☐ acute angle
- ☐ right angle
- ☐ obtuse angle
- ☐ straight angle

MCQ 41: Identify the type of the highlighted angle.

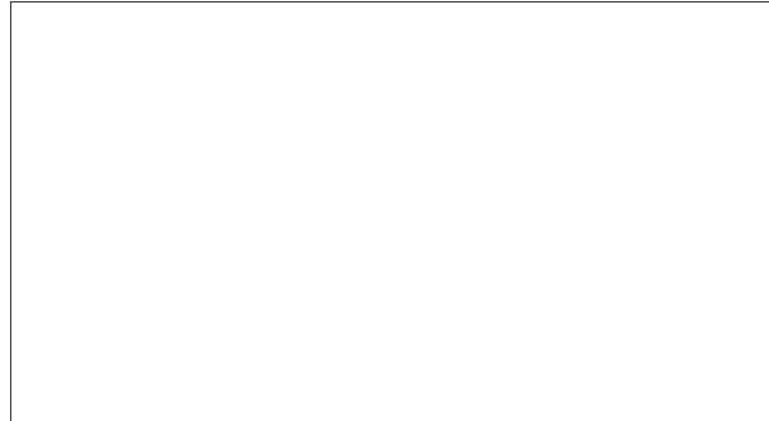


Choose one answer:

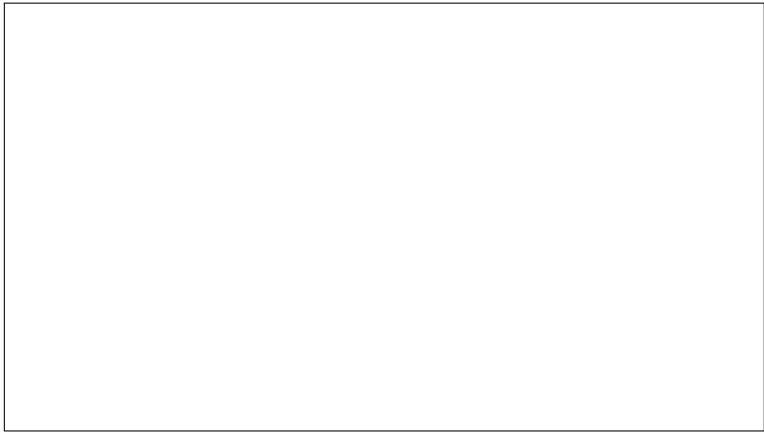
- ☐ acute angle
- ☐ right angle
- ☐ obtuse angle
- ☐ straight angle

D.3 CONSTRUCTING ANGLE TYPES

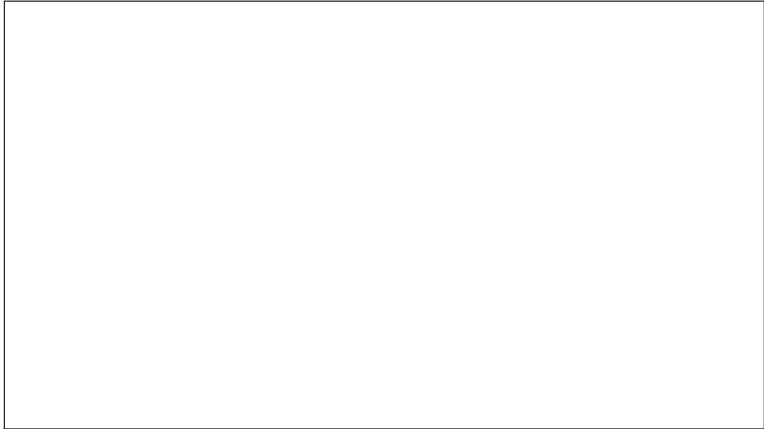
Ex 42: Using a pencil, a ruler, and a protractor, draw an acute angle.



Ex 43: Using a pencil, a ruler, and a protractor, draw an obtuse angle.



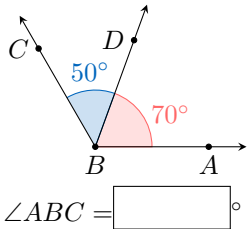
Ex 44: Using a pencil, a ruler, and a protractor, draw a right angle.



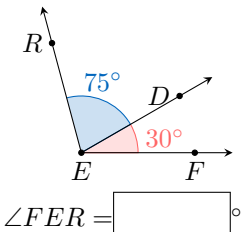
E ANGLE ADDITION

E.1 ADDING ANGLES

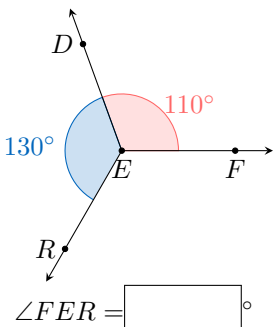
Ex 45: Calculate the measure of $\angle ABC$.



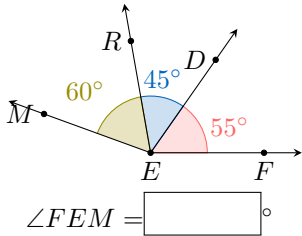
Ex 46: Calculate the measure of $\angle FER$.



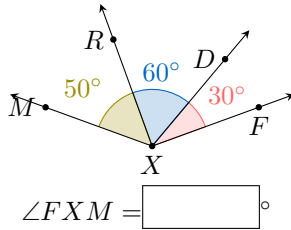
Ex 47: Calculate the measure of $\angle FER$.



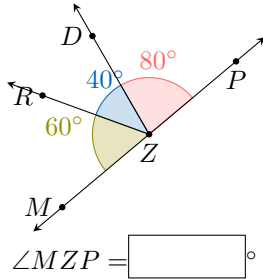
Ex 48: Calculate the measure of $\angle FEM$.



Ex 49: Calculate the measure of $\angle FXM$.

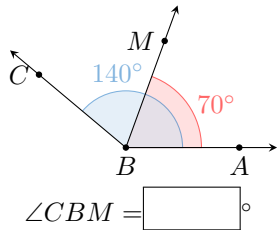


Ex 50: Calculate the measure of $\angle MZP$.

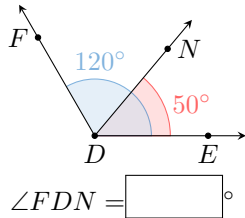


E.2 SUBTRACTING ANGLE

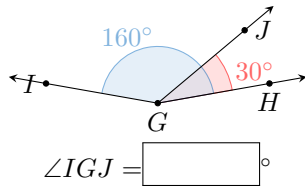
Ex 51: Calculate the measure of $\angle CBM$.



Ex 52: Calculate the measure of $\angle FDN$.

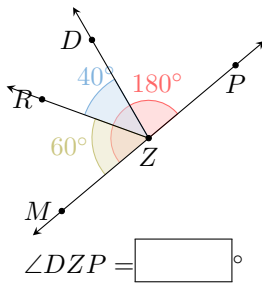


Ex 53: Calculate the measure of $\angle IGJ$.

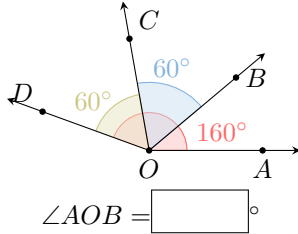


Ex 54: Calculate the measure of $\angle DZP$ by subtracting the known angles from the larger angle using the angle addition postulate.





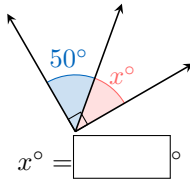
Ex 55: Calculate the measure of $\angle AOB$ by subtracting the known angles from the larger angle using the angle addition postulate.



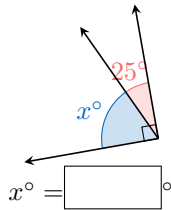
F ANGLE PROPERTIES

F.1 CALCULATING AN UNKNOWN ANGLE IN A RIGHT ANGLE

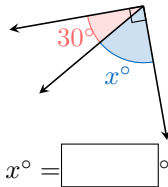
Ex 56: Calculate the measure of the unknown angle.



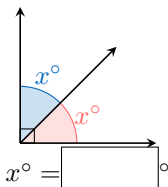
Ex 57: Calculate the measure of the unknown angle.



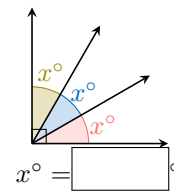
Ex 58: Calculate the measure of the unknown angle.



Ex 59: Calculate the measure of the unknown angle.

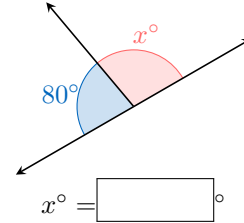


Ex 60: Calculate the measure of the unknown angle.

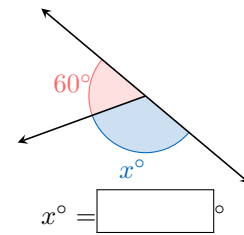


F.2 CALCULATING AN UNKNOWN ANGLE IN A STRAIGHT ANGLE

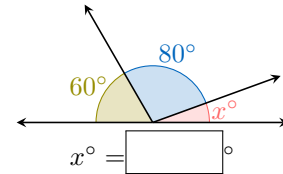
Ex 61: Calculate the measure of the unknown angle.



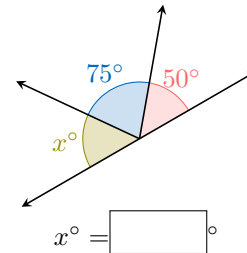
Ex 62: Calculate the measure of the unknown angle.



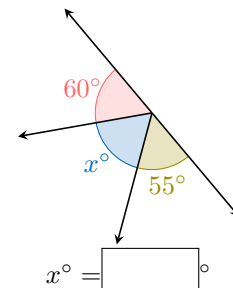
Ex 63: Calculate the measure of the unknown angle.



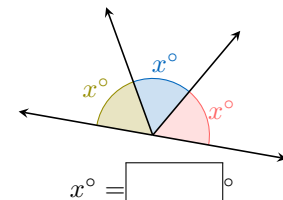
Ex 64: Calculate the measure of the unknown angle.



Ex 65: Calculate the measure of the unknown angle.

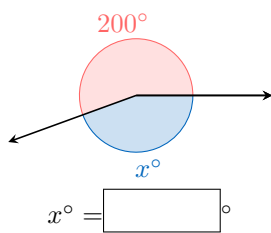


Ex 66: Calculate the measure of the unknown angle.

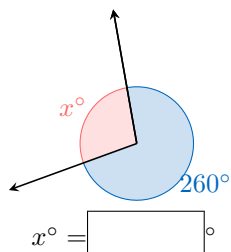


F.3 CALCULATING AN UNKNOWN ANGLE IN A FULL ANGLE

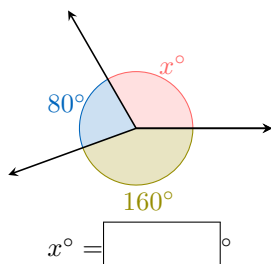
Ex 67: Calculate the measure of the unknown angle.



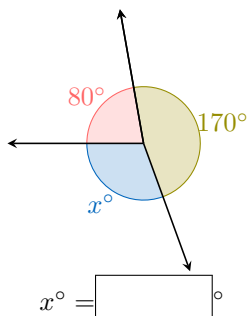
Ex 68: Calculate the measure of the unknown angle.



Ex 69: Calculate the measure of the unknown angle.



Ex 70: Calculate the measure of the unknown angle.



Ex 71: Calculate the measure of the unknown angle.

