

Overview of problems



Example Set: A

Find the measure of the complement and supplement of the given angle

$$\angle A = 30^\circ$$

$$\angle X = 54^\circ$$

$$\angle M = y^\circ$$

Angles F and G are supplementary. Find the values of F and G.

$$m\angle F = 2x \quad m\angle G = x - 15$$

Angles A and B are complementary. Find the values of A and B.

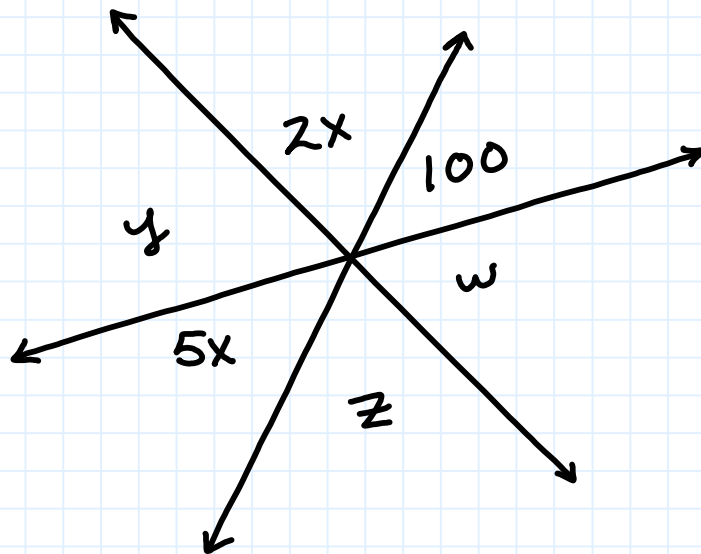
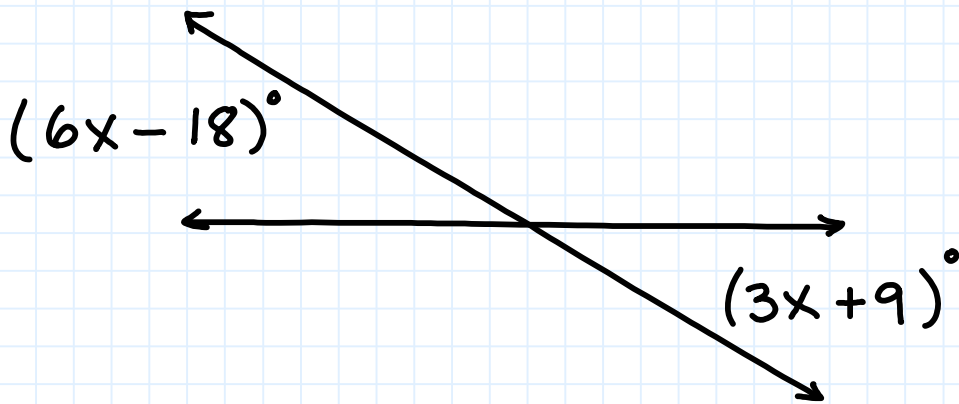
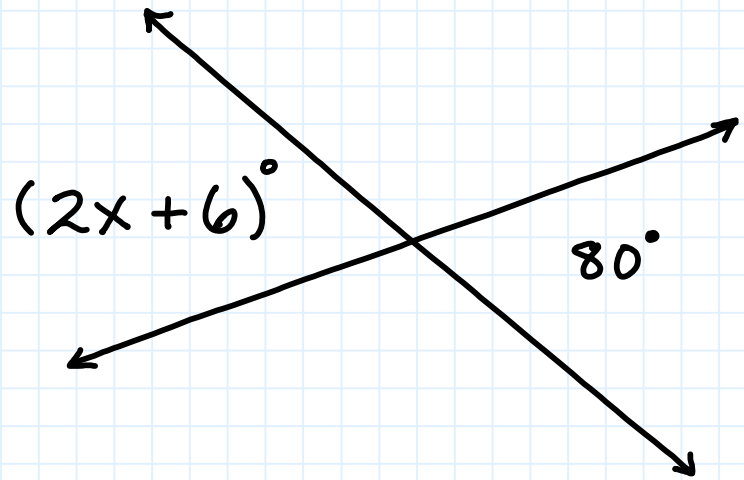
$$m\angle A = 3x + 5 \quad m\angle B = 2x$$

The measure of a supplement of an angle is 30 more than twice the measure of the angle. Find the measure of the angle and its supplement. (hint: write an equation)



Example Set: B

Find the values of the vertical angles.

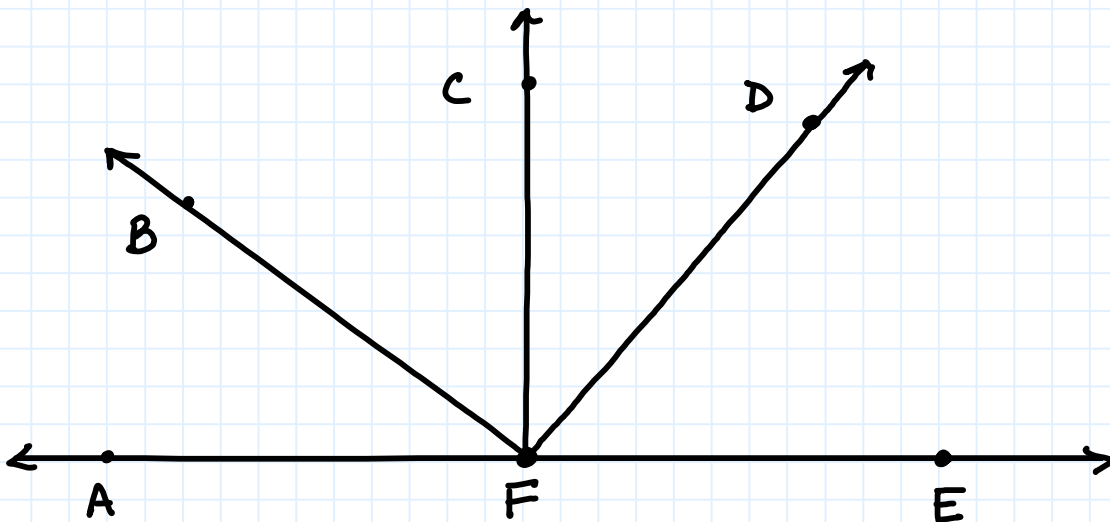




Example Set: C

Use the diagram and information to find the measures of the following angles

$m\angle EFD$	$m\angle CFD$	$m\angle AFB$	$m\angle BFE$	$m\angle BFC$
30°				
x°				



$$\overrightarrow{BF} \perp \overrightarrow{FD}, \quad \overrightarrow{CF} \perp \overrightarrow{FE}$$

Overview of problems- KEY



Example Set: A

Find the measure of the complement and supplement of the given angle

$$\angle A = 30^\circ$$
$$C = 60^\circ \quad S = 150^\circ$$

$$\angle X = 54^\circ$$
$$C = 36^\circ \quad S = 126^\circ$$

$$\angle M = y^\circ$$
$$C = (90 - y^\circ)$$
$$S = (180 - y^\circ)$$

Angles F and G are supplementary. Find the values of F and G.

$$m\angle F = 2x \quad m\angle G = x - 15$$

$$\angle F = 130^\circ$$
$$\angle G = 50^\circ$$

Angles A and B are complementary. Find the values of A and B.

$$m\angle A = 3x + 5 \quad m\angle B = 2x$$

$$\angle A = 56^\circ$$
$$\angle B = 34^\circ$$

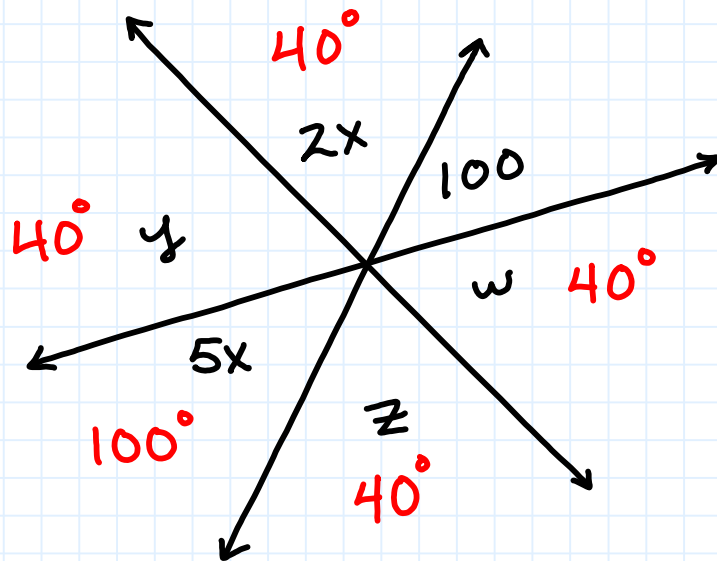
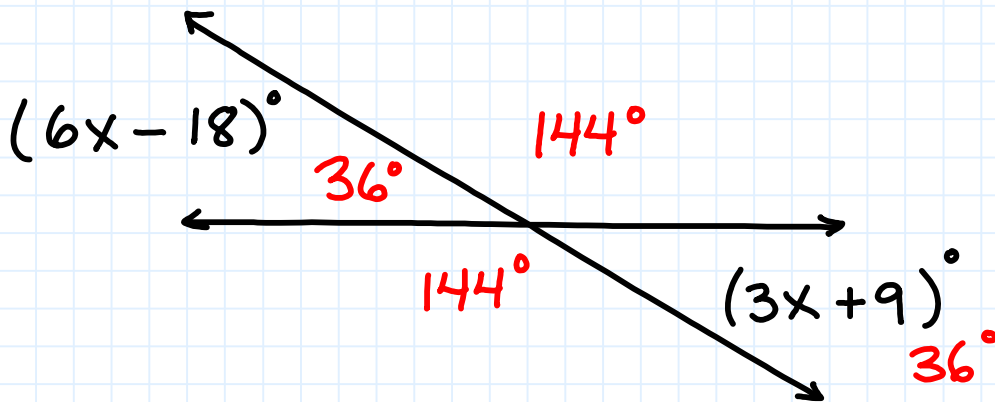
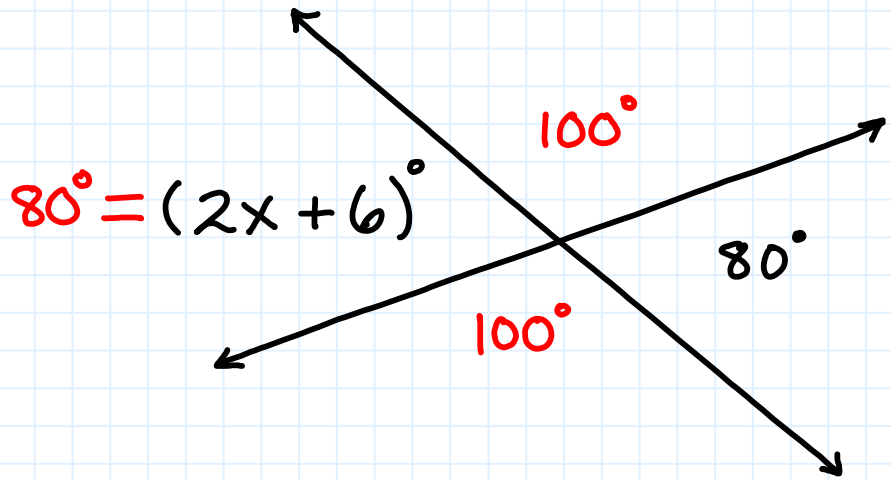
The measure of a supplement of an angle is 30 more than twice the measure of the angle. Find the measure of the angle and its supplement. (hint: write an equation)

$$130^\circ, 50^\circ$$



Example Set: B

Find the values of the vertical angles.

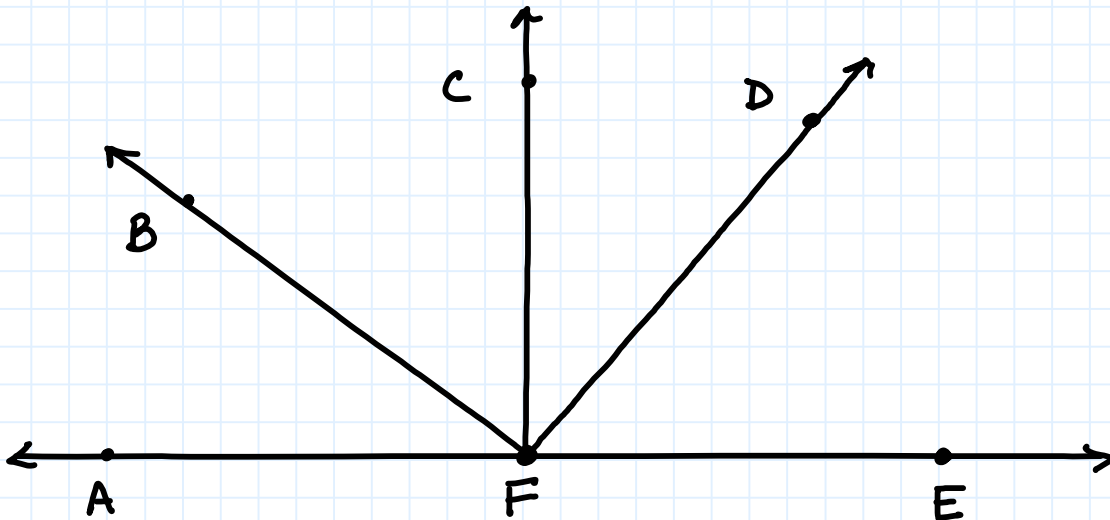




Example Set: C

Use the diagram and information to find the measures of the following angles

$m\angle EFD$	$m\angle CFD$	$m\angle AFB$	$m\angle BFE$	$m\angle BFC$
30°	60°	60°	120°	30°
x°	$(90-x)^\circ$	$(90-x)^\circ$	$(90+x)^\circ$	x°



$$\overrightarrow{BF} \perp \overrightarrow{FD}, \quad \overrightarrow{CF} \perp \overrightarrow{FE}$$