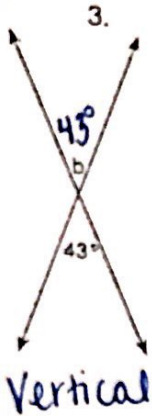


Day 3 - Special Angle Pairs Practice

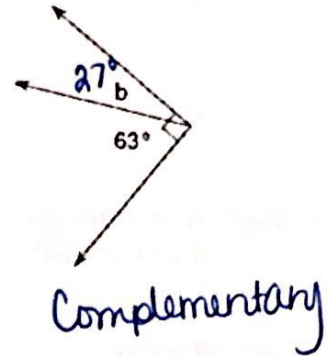
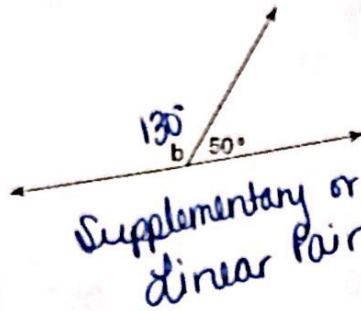
HW: 1-9, 12, 15-23

Questions 1-3: Identify the types of angles shown (complementary, supplementary, linear pair, vertical angles). Then find the measure of the missing angle.

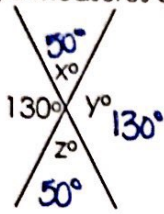
1.



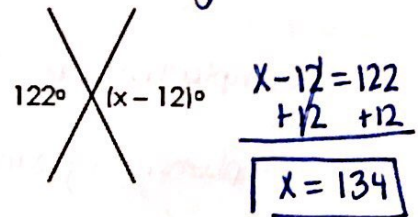
2.



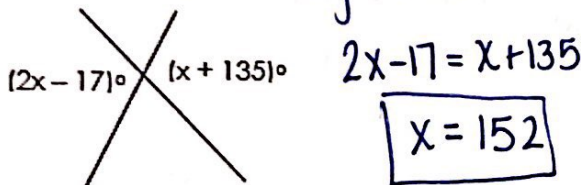
4. Find the angle measures of x, y, and z.



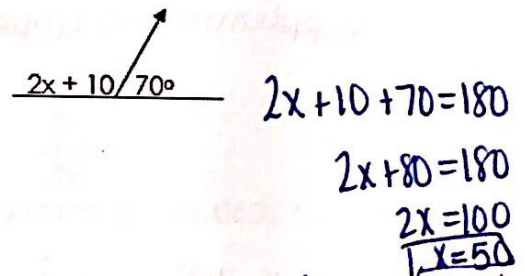
5. Solve for x. Vertical angles ( $\cong$ )



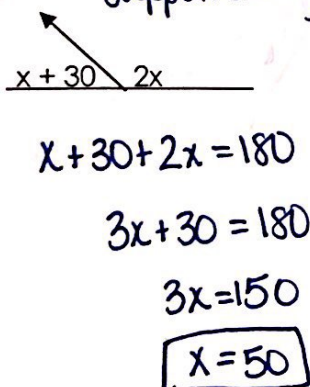
6. Solve for x. Vertical Angles ( $\cong$ )



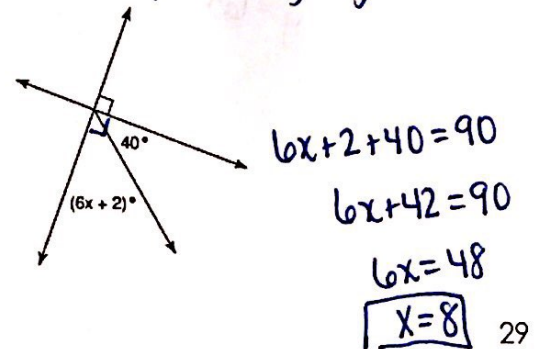
7. Solve for x. Linear Pair Supplementary Angles (add to 180)



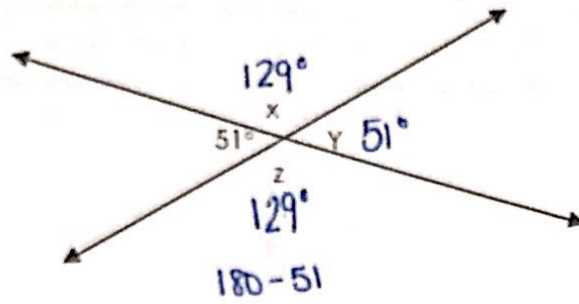
8. Solve for x. Linear Pair Supplementary Angles (add to 180)



9. Solve for x. Complementary Angles (add to 90)



10) Find x, y, and z



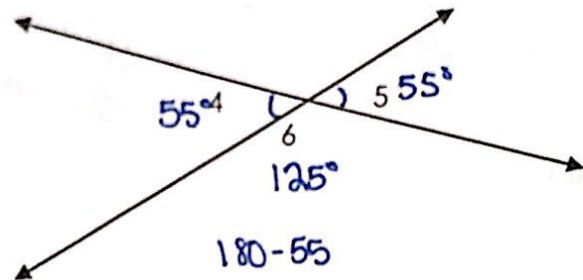
11) Given:  $m\angle 4 = (2x + 5)^\circ$   
 $m\angle 5 = (x + 30)^\circ$

Find:  $m\angle 6$

$$\begin{aligned} \angle 5 &= 25 + 30 \\ &= 55^\circ \end{aligned}$$

$$\boxed{\angle 6 = 125^\circ}$$

$$\begin{aligned} 2x + 5 &= x + 30 \\ x &= 25 \end{aligned}$$



12) Identify each pair of angles as adjacent, vertical, complementary, supplementary, and/or linear pair.

a)  $\angle 1$  and  $\angle 2$

complementary

b)  $\angle 3$  and  $\angle 4$

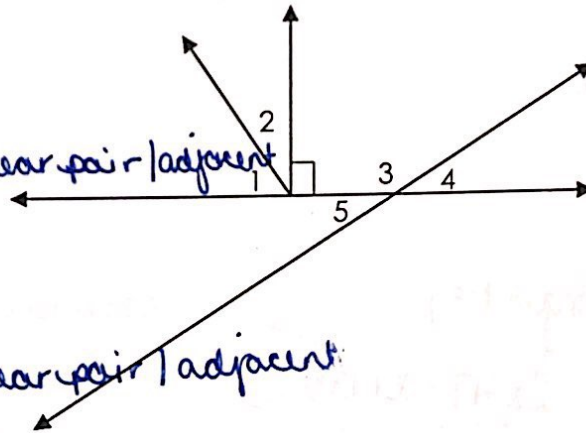
supplementary / linear pair / adjacent

c)  $\angle 5$  and  $\angle 4$

vertical angles

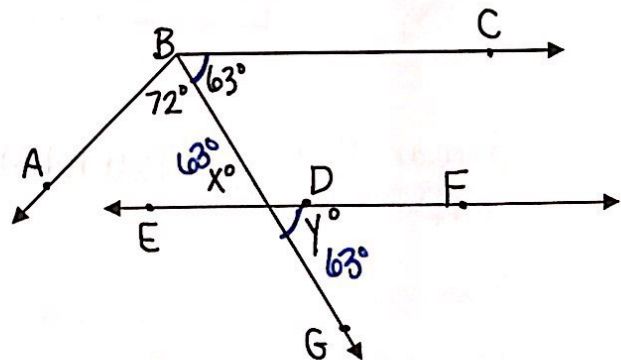
d)  $\angle 3$  and  $\angle 5$

supplementary / linear pair / adjacent



13) Find x and y if  $\angle CBD$  is congruent to  $\angle FDG$ .

$$\begin{aligned} x &= 63^\circ \\ y &= 63^\circ \end{aligned}$$



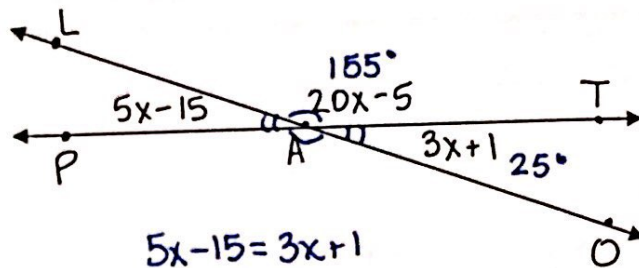
14) Find each of the following:

a)  $x = 8$

b)  $m\angle LAT = 20(8) - 5 = 155^\circ$

c)  $m\angle TAO = 3(8) + 1 = 25^\circ$

d)  $m\angle PAO = 155^\circ$

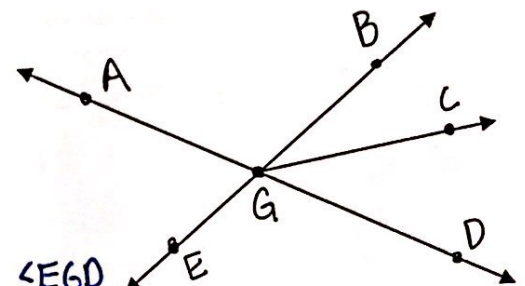


$$5x - 15 = 3x + 1$$

$$2x = 16$$

$$x = 8$$

In the figure,  $\vec{GA}$  and  $\vec{GD}$ , and  $\vec{GB}$  and  $\vec{GE}$  are opposite rays.



15) Which angle forms a linear pair with  $\angle DGC$ ?  $\angle AGC$

16) Do  $\angle BGC$  and  $\angle EGD$  form a linear pair? no

17) Name two angles that are adjacent to  $\angle CGD$ .  $\angle BGC$   $\angle EGD$

18) Name two angles that form a linear pair with  $\angle BGD$ .  $\angle AGB$   $\angle EGD$

19) Name three angles adjacent to  $\angle AGB$ .  $\angle AGE$   $\angle BGC$   $\angle BGD$

20) Do  $\angle CGE$  and  $\angle CGB$  form a linear pair? yes

21) Name the vertical angle to  $\angle EGD$ .  $\angle AGB$

22) Name another pair of vertical angles.  $\angle AGE$  and  $\angle BGD$

23) True or False?

a.  $\angle PRN$  is acute. false (complementary)

b.  $\angle 4 \cong \angle 8$  true (vertical  $\angle$ 's)

c.  $m\angle 5 + m\angle 6 = 90$  true

d.  $\overline{QR} \perp \overline{PR}$  false

e.  $\angle 7$  is obtuse true

