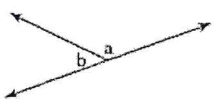
Name Schlansky
Mr. Schlansky

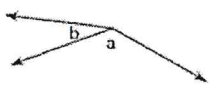
Date _____
Geometry

Angle Pairs: Linear Pairs, Complementary, Vertical

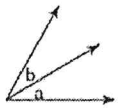
Determine whether the following pairs of angles are linear pairs, complementary, vertical, or neither.

1) 

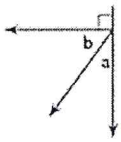
linear pair

2) 

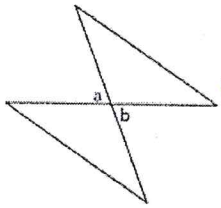
neither

3) 

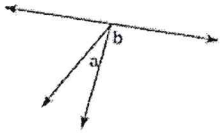
neither

4) 

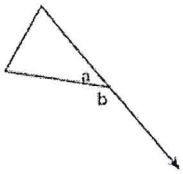
Complementary

5) 

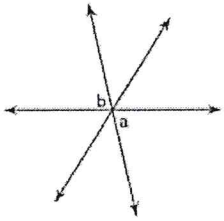
vertical angles

6) 

neither

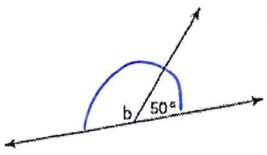
7) 

linear pair

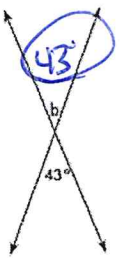
8) 

vertical angles

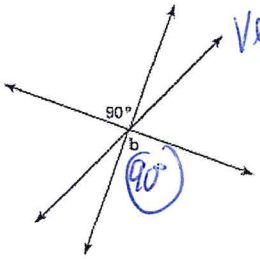
Find angle b in the following examples.

9) 

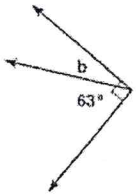
linear pair
180
-50
130°

10) 

Vertical angles

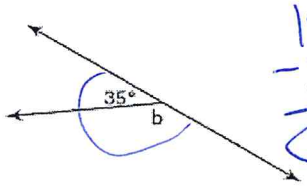
11) 

90°
Vertical angles

12) 

Complementary
90
-63
27°

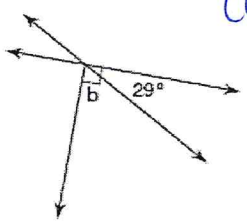
13)



linear pair

180
-35
145°

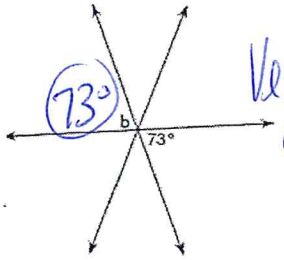
14)



Complementary

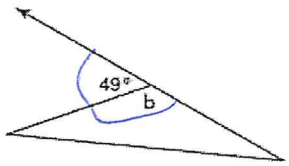
90
-29
61°

15)



Vertical angles

16)

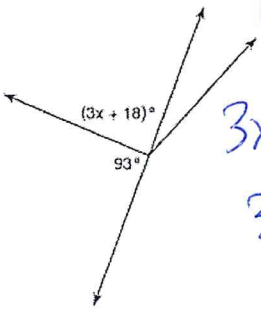


linear pair

180
-49
131°

Find the value of x.

17)



linear pair

$3x+18+93=180$

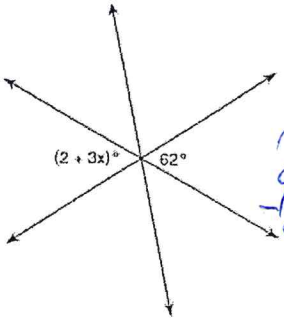
$3x+111=180$

$-111\ \ -111$

$\frac{3x}{3}=\frac{69}{3}$

$x=23$

18)



vertical angles

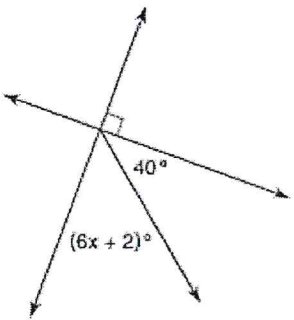
$2+3x=62$

$-2\ \ -2$

$\frac{3x}{3}=\frac{60}{3}$

$x=20$

19)



Complementary

$6x+2+40=90$

$6x+42=90$

$-42\ \ -42$

$\frac{6x}{6}=\frac{48}{6}$

$x=8$