Geometry Worksheet HW Name: _____

Block: _____

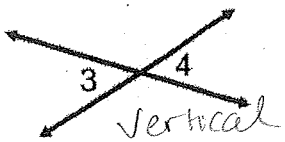
Identify each pair of angles as adjacent, vertical, complementary, supplementary, or a linear pair.

180°

1.

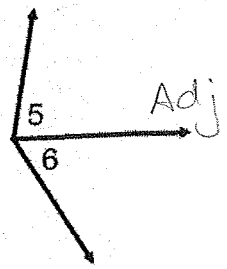
Adj.

2.



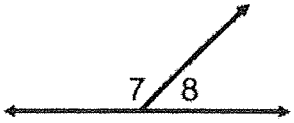
Vertical

3.



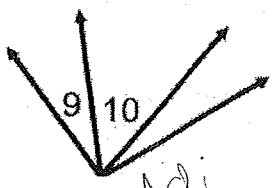
Adj.

4.



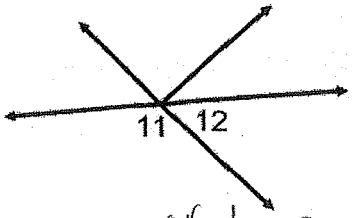
Linear Pair / Supp. (they are adj)

5.



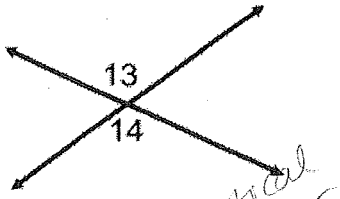
Adj

6.



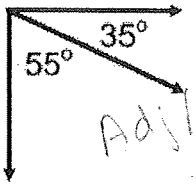
Linear Pair / supp

7.



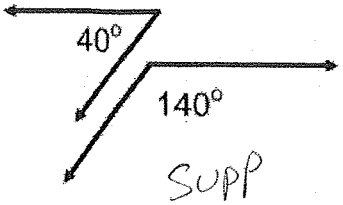
Vertical pair

8.



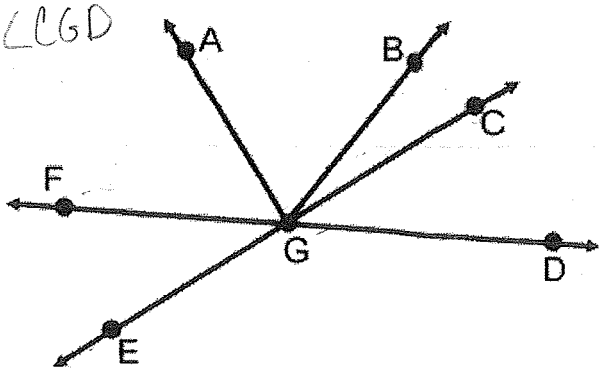
Adj/comp.

9.



Supp

Use the figure at the right to answer each question.



10. Name two acute vertical angles. ∠FGE & ∠CGD

Multiple Answer Possibilities

11. Name two obtuse vertical angles.

∠FGB & ∠EGD

12. Name a pair of adjacent angles

∠ABG & ∠BGC

13. Name a linear pair.

∠FGC & ∠CGD

SWAP with Partner & check answers -

14. Name a pair of complementary angles.

∠AGB & ∠BGC

15. Name an angle supplementary to ∠FGE

∠EGD

or

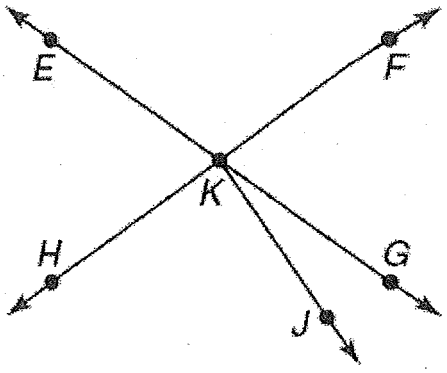
∠FGC

Geometry Worksheet

For #1-6, use the figure at the right.

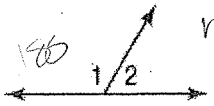
SKIP

1. Name two acute vertical angles.
2. Name two obtuse vertical angles.
3. Name a linear pair.
4. Name two acute adjacent angles.
5. Name an angle complementary to ∠FKG.
6. Name an angle supplementary to ∠FKG.



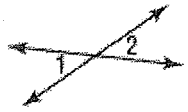
Find the measure of each numbered angle.

7. $m\angle 2 = 57$



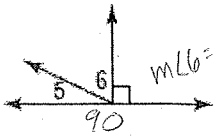
$m\angle 1 = 123$

8. $m\angle 1 = 38$ congruent



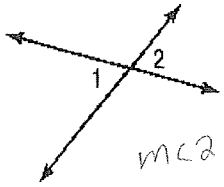
$m\angle 2 = 38$

9. $m\angle 5 = 22$



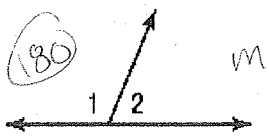
$m\angle 6 = 68$

10. $m\angle 1 = 65$



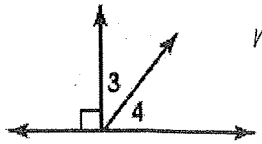
$m\angle 2 = 65$

11. $m\angle 2 = 67$



$m\angle 1 = 113$

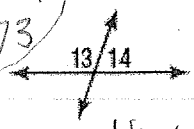
12. $m\angle 3 = 38$



$m\angle 4 = 52$

13. $m\angle 13 = 4x + 11$, $4(24)+11$
$m\angle 14 = 3x + 1$ $3(24)+1$

$m\angle 13 = 107$
$m\angle 14 = 73$



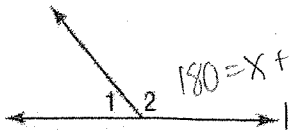
$4x + 11 + 3x + 1 = 180$
$7x + 12 = 180$
$7x = 168$
$x = 24$

14. $m\angle 2 = 4x - 26$, $4(30)-26$
$m\angle 3 = 3x + 4$ $3(30)+4$

$4x - 26 = 3x + 4$
$x = 30$

$m\angle 2 = 94$
$m\angle 3 = 94$

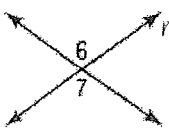
15. $m\angle 1 = x + 10$ $38+10$
$m\angle 2 = 3x + 18$ $3(38)+18$



$180 = x + 10 + 3x + 18$
$180 = 4x + 28$
$152 = 4x$
$38 = x$

$m\angle 1 = 48$
$m\angle 2 = 132$

16. $m\angle 6 = 7x - 24$
$m\angle 7 = 5x + 14$

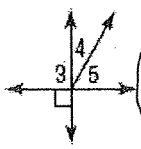


$m\angle 6 = 7(19) - 24$
$m\angle 7 = 5(19) + 14$

$7x - 24 = 5x + 14$
$2x = 38$
$x = 19$

$m\angle 6 = 109$
$m\angle 7 = 109$

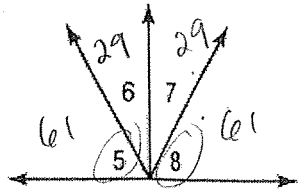
17. $m\angle 4 = 2x - 5$ $2(18)-5$
$m\angle 5 = 4x - 13$ $4(18)-13$



$m\angle 3 = 90$
$m\angle 4 = 31$
$m\angle 5 = 59$

$2x - 5 + 4x - 13 = 90$
$6x - 18 = 90$
$6x = 108$
$x = 18$

18. $\angle 7$ and $\angle 8$ are complementary. $\angle 5 \cong \angle 8$ and $m\angle 6 = 29$.



$90 - 29 = 61$