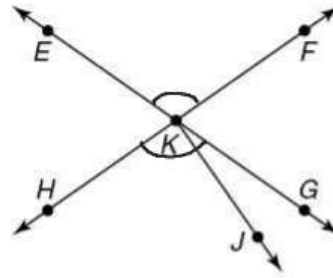


Geometry Worksheet

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

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 $\angle FKG$.
6. Name an angle supplementary to $\angle FKG$.



Find the measure of each numbered angle.

7. $m\angle 2 = 57$
 $180 - 57$

8. $m\angle 1 = 38$

9. $m\angle 5 = 22$ $90 - 22$

10. $m\angle 1 = 65$

11. $m\angle 2 = 67$ $180 - 67$

12. $m\angle 3 = 38$ $90 - 38$

13. $m\angle 13 = 4x + 11 = 107$
 $m\angle 14 = 3x + 1 = 73$

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

14. $m\angle 2 = 4x - 26, 94$
 $m\angle 3 = 3x + 4, 94$

$4x - 26 = 3x + 4$
 $x - 26 = 4$
 $x = 30$
 $m\angle 2 = 2x - 5 = 31$
 $m\angle 3 = 4x - 13 = 59$

15. $m\angle 1 = x + 10 = 49$
 $m\angle 2 = 3x + 18 = 132$

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

16. $m\angle 6 = 7x - 24 = 109$
 $m\angle 7 = 5x + 14 = 109$

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

17. $m\angle 4 = 2x - 5 = 31$
 $m\angle 5 = 4x - 13 = 59$

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

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

$m\angle 5 + m\angle 6 = 90$
 $m\angle 5 + 29 = 90$
 $m\angle 5 = 61$