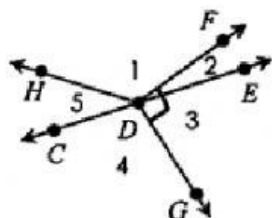


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

## Geometry Unit 1: Geometry Basics

### Quiz 1.4-1.5

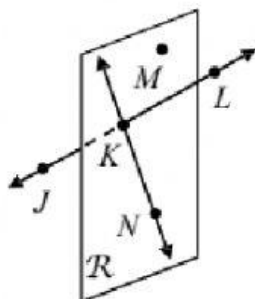
Use the diagram from questions 1-7.



**DG ⊥ DF**

|                                                                                 |                                                                                                                                          |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name the sides of $\angle 4$ .                                               | ray                                                                                                                                      |
| 2. Name the vertex of $\angle 2$ .                                              | point                                                                                                                                    |
| 3. Give another name for $\angle 3$ .                                           | angle                                                                                                                                    |
| 4. Classify $\angle 5$ .                                                        | <input type="checkbox"/> Acute<br><input type="checkbox"/> Obtuse<br><input type="checkbox"/> Right<br><input type="checkbox"/> Straight |
| 5. Classify $\angle CDE$ .                                                      | <input type="checkbox"/> Acute<br><input type="checkbox"/> Obtuse<br><input type="checkbox"/> Right<br><input type="checkbox"/> Straight |
| 6. If $m\angle 5 = 42^\circ$ and $m\angle 1 = 117^\circ$ , find $m\angle CDF$ . | $m\angle CDF =$                                                                                                                          |
| 7. If $m\angle 3 = 73^\circ$ , $m\angle FDE$ .                                  | $m\angle FDE =$                                                                                                                          |

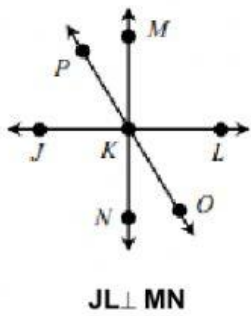
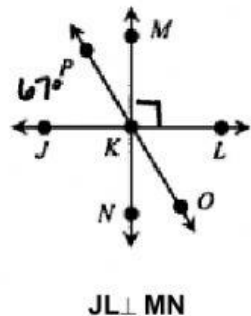
Use the diagram for questions 8-10.



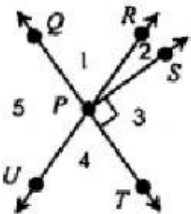
**BC bisects  $\angle FBE$**

|                                                                                                                                            |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 8. If $m\angle ABF = (7x + 20)^\circ$ ,<br>$m\angle FBC = (2x - 5)^\circ$ , and<br>$m\angle ABC = 159^\circ$ , find the value of $x$ .     | $x =$           |
| 9. If $m\angle DBC = (12x - 3)^\circ$ ,<br>$m\angle DBE = (5x + 12)^\circ$ , and<br>$m\angle EBC = (3x + 13)^\circ$ , find $m\angle EBC$ . | $m\angle EBC =$ |
| 10. If $m\angle FBC = (10x - 9)^\circ$ ,<br>$m\angle CBE = (4x + 15)^\circ$ , find $m\angle FBE$ .                                         | $m\angle FBE =$ |

Use the diagram from questions 11-14.

|                                                                                                                    |                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><math>JL \perp MN</math></p>  | <p>11. Classify <math>\angle PKM</math> and <math>\angle NKO</math>.<br/>(Check all names that apply.)</p> <p><input type="checkbox"/> Adjacent<br/><input type="checkbox"/> Vertical<br/><input type="checkbox"/> Complementary<br/><input type="checkbox"/> Supplementary<br/><input type="checkbox"/> Linear Pair</p> |
|                                                                                                                    | <p>12. Classify <math>\angle NKO</math> and <math>\angle OKL</math>.<br/>(Check all names that apply.)</p> <p><input type="checkbox"/> Adjacent<br/><input type="checkbox"/> Vertical<br/><input type="checkbox"/> Complementary<br/><input type="checkbox"/> Supplementary<br/><input type="checkbox"/> Linear Pair</p> |
|  <p><math>JL \perp MN</math></p> | <p>If <math>m\angle KP = 67^\circ</math>, find each measure:</p>                                                                                                                                                                                                                                                         |
|                                                                                                                    | <p>13. <math>m\angle PKL =</math></p>                                                                                                                                                                                                                                                                                    |
|                                                                                                                    | <p>14. <math>m\angle NKO =</math></p>                                                                                                                                                                                                                                                                                    |

Use the diagram for questions 15-17.

|                                                                                     |                                                                                                                                                                       |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>15. If <math>m\angle 1 = (7x - 19)^\circ</math>, and <math>m\angle 2 = (x + 5)^\circ</math>, find <math>m\angle 2</math>.</p> <p><math>m\angle 2 =</math></p>      |
|                                                                                     | <p>16. If <math>m\angle 1 = (6x + 25)^\circ</math>, and <math>m\angle 4 = (10x - 11)^\circ</math>, find <math>m\angle 1</math>.</p> <p><math>m\angle 1 =</math></p>   |
|                                                                                     | <p>17. If <math>m\angle 4 = (3x + 7)^\circ</math>, and <math>m\angle 5 = (9x - 43)^\circ</math>, find <math>m\angle UPS</math>.</p> <p><math>m\angle UPS =</math></p> |

|                                                                                                                                                                                                                                  |                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <p>18. If <math>\angle W</math> and <math>\angle V</math> are supplementary angles and <math>m\angle V = 49^\circ</math>, find <math>m\angle W</math>.</p>                                                                       | <p><math>m\angle W =</math></p> |
| <p>19. If <math>\angle 1</math> and <math>\angle 2</math> are vertical angles, <math>\angle 2</math> and <math>\angle 3</math> are complementary angles, and <math>m\angle 3 = 56^\circ</math>, find <math>m\angle 1</math>.</p> | <p><math>m\angle 1 =</math></p> |
| <p>20. If <math>\angle 1</math> and <math>\angle 2</math> form a linear pair and <math>m\angle 1</math> is 18 degrees less than five times the measure of <math>\angle 2</math>, find <math>m\angle 1</math>.</p>                | <p><math>m\angle 1 =</math></p> |