

Handout 3: Getting the Hang-le Of It - Answers

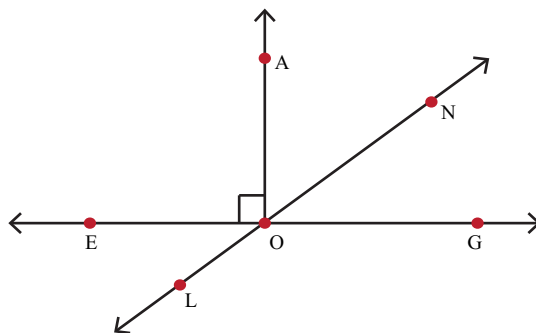


Figure 1

Use the Figure 1 for questions 1-5.

1. Which angle is complementary to $\angle AON$?
 $\angle NOG$ or $\angle EOL$
2. Which angle is supplementary to $\angle AON$?
 $\angle AOL$
3. Suppose $\angle EOL = 50^\circ$. What is $\angle LOG$?
 130°
4. Suppose $\angle EOL = 50^\circ$. What is $\angle AON$?
 40° .
5. Suppose OA bisects \overline{EG} and the length of \overline{EO} is 7 units. How long is \overline{EG} ?
14 units
6. Suppose an angle's measurement is equal to $3x - 4$ and while the angle ver-

tical to it is $2x + 2$. What is the value of x ?
6.

7. Complementary angles have the measures $5x - 3$ and $3x + 5$. What are the measures of the angles in degrees?
 38° and 52°
8. Supplementary angles measure $27x + 5$ and $71 - x$. What are the measures of the angles in degrees?
 113° and 67° .
9. An angle is 26 degrees less than its supplement. What are the measures of the angles?
 103° and 77°
10. $\overline{XY} = 4w$, $\overline{YZ} = 6w - 6$, $\overline{XZ} = 8w + 1$, and Y is between X and Z . How long is \overline{XZ} , and is Y its midpoint?
 $\overline{XZ} = 29$, and Y is not its midpoint.