Geometry Mastery Test #1 Review #2
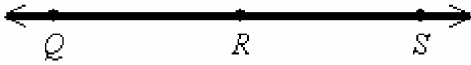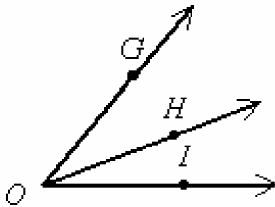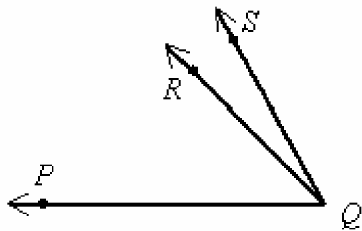
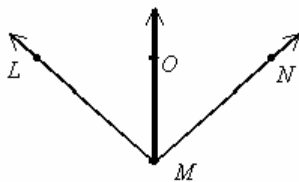**Short Answer**

1. If $RS = 35.2$ and $QS = 72$, find QR.

2. Find the distance between the points $(1, -2)$ and $(-4, -3)$.

3. Find the midpoint of the segment with endpoints $(-6, -8)$ and $(7, 6)$.

4. If $m\angle HOI = 21°$ and $m\angle GOI = 50°$, then what is the measure of $\angle GOH$?

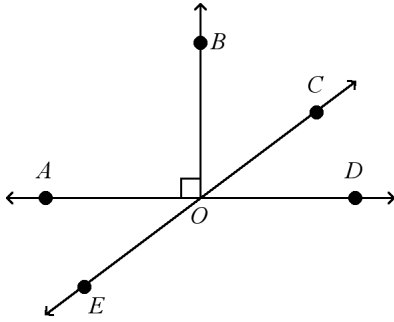5. $m\angle SQR = (2x + 6)°$ and $m\angle PQR = (10x - 5)°$ and $m\angle SQP = 61°$.
   Find $m\angle SQR$ and $m\angle PQR$.

6. In the figure (not drawn to scale), $\overrightarrow{MO}$ bisects $\angle LMN$, $m\angle LMO = (5x - 24)°$, and $m\angle NMO = (x + 52)°$.
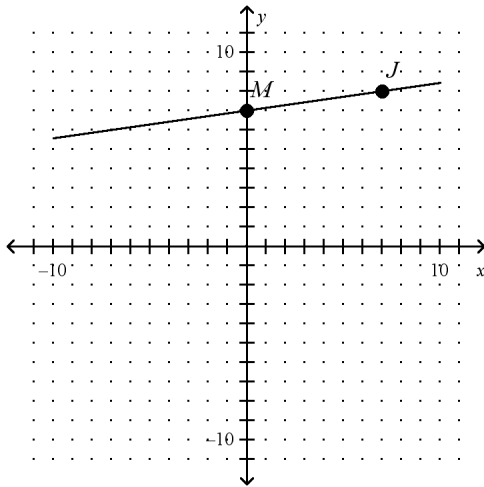   Solve for x and find $m\angle LMN$.

7. Name an angle sup*plementary* to ∠*DOE*.

Complete the conditional statement to make a true statement.

8. If ∠*R* and ∠*S* are complementary and $m\angle R = 15°$, then

9. If ∠*G* and ∠*H* are supplementary and $m\angle H = 69°$, then _____.

10. Name a polygon with 8 sides.

11. The midpoint of $\overline{JK}$ is $M(0, 7)$. One endpoint is $J(7, 8)$. Find the coordinates of the other endpoint.
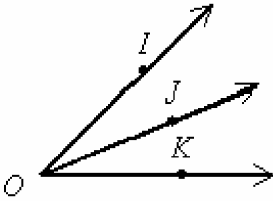

12. Determine the coordinates of the midpoint of $\overline{YZ}$ and find the approximate distance YZ for the points $Y(3, -6)$ and $Z(4, 7)$.

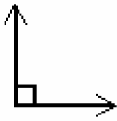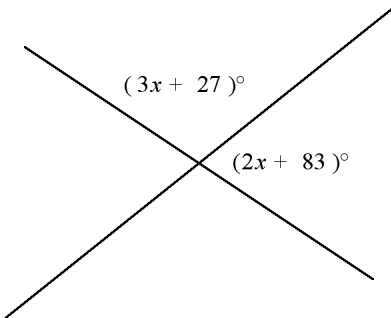13. Find the midpoint of the segment with endpoints (1, −1) and (−17, 17).

14. If $m\angle IOJ = 22°$ and $m\angle JOK = 21°$, then what is the measure of $\angle IOK$?

15. Classify the angle as right, acute, or obtuse.

16. Solve for x:

$(3x + 27)°$

$(2x + 83)°$

Geometry Mastery Test #1 Review #2
Answer Section

SHORT ANSWER

1. 36.8
2. $\sqrt{26}$
3. $(\frac{1}{2}, -1)$
4. 29°
5. $m\angle SQR = 16°$ and $m\angle PQR = 45°$
6. 19, 142°
7. $\angle COD$
8. $m\angle S = 75°$
9. $m\angle G = 111°$
10. octagon
11. $(-7, 6)$
12. midpoint = $(\frac{7}{2}, \frac{1}{2})$

   distance = $\sqrt{170} \approx 13$
13. $(-8, 8)$
14. 43°
15. right
16. $x = 14$