

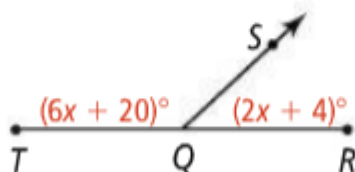
# Day 3 - 15 Homework

Page 32 #23

Page 38 #7-10, 24-25, 32, 37

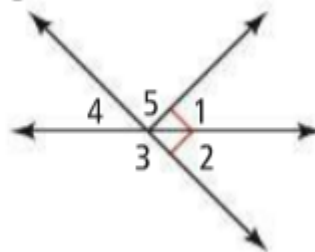
23.  $\angle RQT$  is a straight angle.

What are  $m\angle RQS$  and  $m\angle TQS$ ?

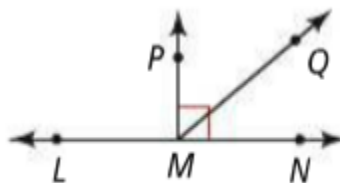


Use the diagram at the right. Is each statement true? Explain.

7.  $\angle 1$  and  $\angle 5$  are adjacent angles.
8.  $\angle 3$  and  $\angle 5$  are vertical angles.
9.  $\angle 3$  and  $\angle 4$  are complementary.
10.  $\angle 1$  and  $\angle 2$  are supplementary.



24. Name two pairs of angles that form a linear pair in the diagram at the right.
25.  $\angle EFG$  and  $\angle GFH$  are a linear pair,  $m\angle EFG = 2n + 21$ , and  $m\angle GFH = 4n + 15$ . What are  $m\angle EFG$  and  $m\angle GFH$ ?



32. The measure of one angle is 20 less than the measure of its complement.

37. **Algebra**  $\angle RQS$  and  $\angle TQS$  are a linear pair where  $m\angle RQS = 2x + 4$  and  $m\angle TQS = 6x + 20$ .
  - a. Solve for  $x$ .
  - b. Find  $m\angle RQS$  and  $m\angle TQS$ .
  - c. Show how you can check your answer.