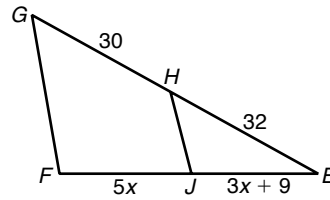
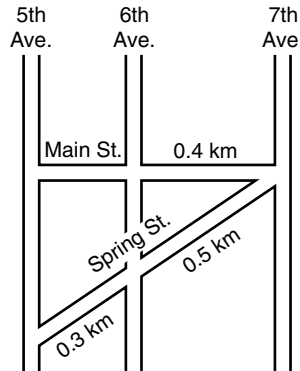


LESSON **7-4** **Problem Solving**
Applying Properties of Similar Triangles

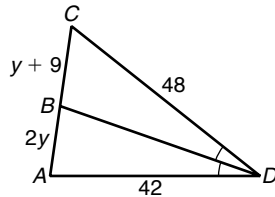
1. Is $\overline{GF} \parallel \overline{HJ}$ if $x = 5$? Explain.



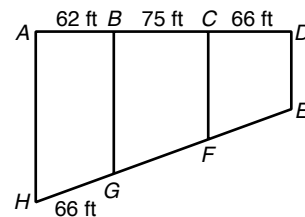
2. On the map, 5th Ave., 6th Ave., and 7th Ave. are parallel. What is the length of Main St. between 5th Ave. and 6th Ave.?



3. Find the length of \overline{BC} .

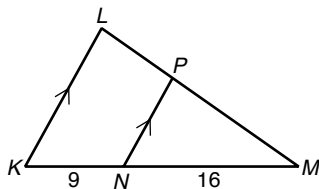


4. The figure shows three lots in a housing development. If the boundary lines separating the lots are parallel, what is GF to the nearest tenth?



Choose the best answer.

5. If $LM = 22$, what is PM ?



- A** 7.92 **C** 14.08
B 12.38 **D** 29.92

6. In $\triangle QRS$, the bisector of $\angle R$ divides \overline{QS} into segments with lengths 2.1 and 2.8. If $RQ = 3$, which is the length of \overline{RS} ?

- F** 2 **H** 4
G 2.25 **J** 4.5

7. In $\triangle CDE$, the bisector of $\angle C$ divides \overline{DE} into segments with lengths $4x$ and $x + 13$. If $CD = 24$ and $CE = 32$, which is the length of \overline{DE} ?

- A** 20 **C** 26
B 24 **D** 28