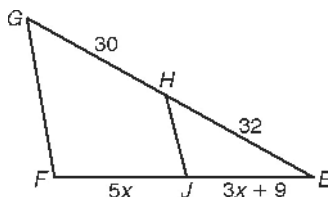


LESSON
8-4

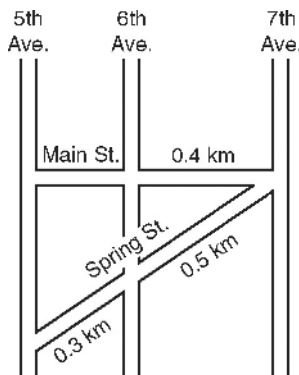
Problem Solving

Applying Properties of Similar Triangles

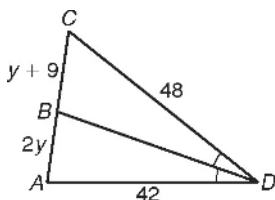
1. Is $\overline{GF} \parallel \overline{HJ}$ if $x = 5$? Explain.



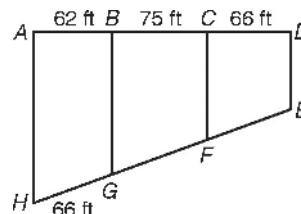
2. On the map, 5th Ave., 6th Ave., and 7th Ave. are parallel. What is the length of Main St. between 5th Ave. and 6th Ave.?



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

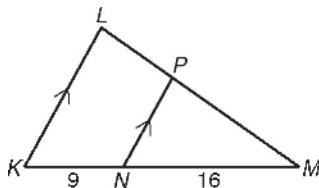


4. The figure shows three lots in a housing development. If the boundary lines separating the lots are parallel, what is GF to the nearest tenth?



Choose the best answer.

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



- A 7.92
- B 12.38
- C 14.08
- 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
- G 2.25
- H 4
- J 4.5

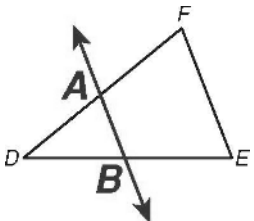
7. In $\triangle CDE$, the bisector of $\angle C$ divides \overline{DE} into segments with lengths $4x$ and $x + 13$. If $CD = 24$ and $CE = 32$, which is the length of \overline{DE} ?

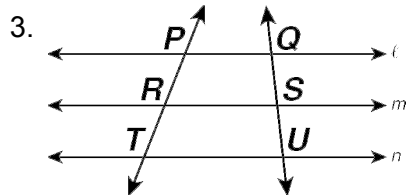
- A 20
- B 24
- C 26
- D 28

Problem Solving

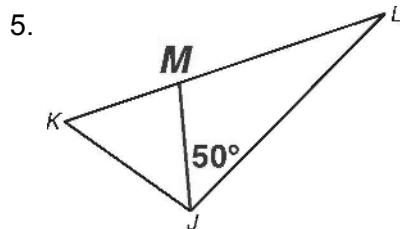
- No; $\frac{EH}{HG} \neq \frac{EJ}{JF}$
- 0.24 km
- 16
- 79.8 ft
- C
- H
- D

Reading Strategies

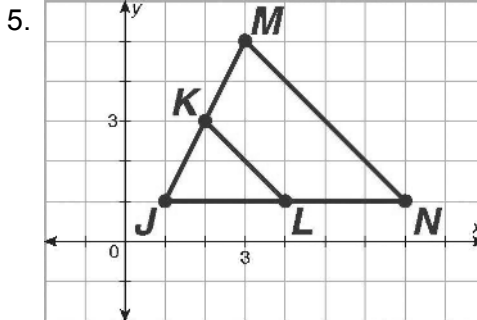
- 
- $\frac{DA}{AF} = \frac{DB}{BE}$



- $\frac{PR}{RT} = \frac{QS}{SU}$

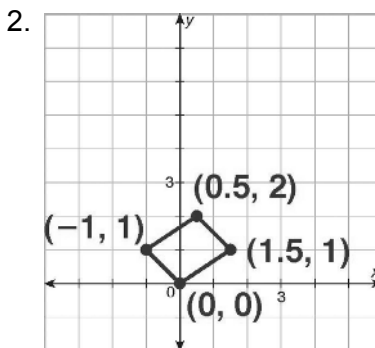
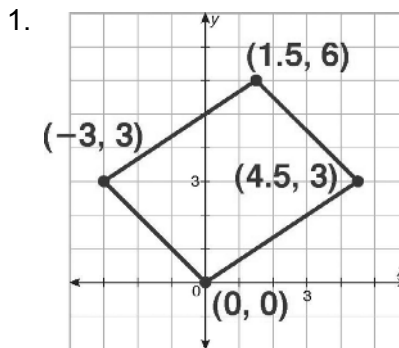


- 50°
- $\frac{LM}{MK} = \frac{LJ}{JK}$



- $\sqrt{5}; 2\sqrt{5}; 3; 6$
- $\frac{\sqrt{5}}{2\sqrt{5}} = \frac{1}{2} = \frac{3}{6}$

Practice B

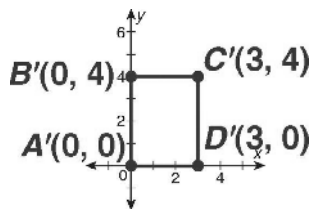


- $\frac{4}{3}; (-20, 0)$
- $\frac{1}{3}; (8, 0)$

8-5 DILATIONS AND SIMILARITY IN THE COORDINATE PLANE

Practice A

- 0, 0, 0, 8, 6, 8, 6, 0
- 0, 0, 0, 4, 3, 4, 3, 0
-



- 2; H(0, 4)

Practice C

