

## ENRICHMENT

### Delivering the Mail

A mail carrier must make deliveries to points *A* through *I*, in alphabetical order, before 5-P.M. She is low on gas but, because her time is limited, the carrier hopes to complete her route without stopping to buy gas. Solve the following problems to find out if she will make it.

First, use your knowledge of the Pythagorean Theorem and special triangles to find all indicated distances on the delivery route.

1. *AB* \_\_\_\_\_
2. *BC* \_\_\_\_\_
3. *CD* \_\_\_\_\_
4. *DE* \_\_\_\_\_
5. *EF* \_\_\_\_\_
6. *FG* \_\_\_\_\_
7. *GH* \_\_\_\_\_ (Round to the nearest tenth.)
8. *HI* \_\_\_\_\_ (Round to the nearest tenth.)
9. Find the total distance she must drive. \_\_\_\_\_
10. The delivery truck gets 17 mi/gal of gas. At the beginning of her deliveries, the driver had 7.8 g of gas in her tank. Will she run out of gas before making her last delivery? \_\_\_\_\_

