

Taylor drove down the street to the recreation center. He passed a library, then a playground, and finally a hospital before arriving at the recreation center. The library is 1.7 kilometers from the hospital. The playground is 1.5 kilometers from the recreation center and 0.6 kilometer from the hospital. Which of the following best represents the distance from the library to the recreation center?

- F** 3.8 km
- G** 2.0 km
- H** 3.2 km
- J** 2.6 km

July '06 Obj 10 - # 38

F $\angle JKM \sim \angle NLM$, because corresponding angles of similar triangles are congruent.

G $\frac{MK}{MN} = \frac{KJ}{NL}$, because the ratios of the lengths of corresponding sides of similar triangles are equal.

H $\frac{KJ}{LN} = \frac{ML}{MK}$, because the ratios of the lengths of corresponding sides of similar triangles are equal.

J $\angle KJM \sim \angle MNL$, because corresponding angles of similar triangles are congruent.

July '06 Obj 10 - # 50 (cont)

Thalia played a word game in which she had a minute to create 5- and 6-letter words from a given word. The given word was *wonderful*. Thalia scored 7 points for each 5-letter word she created and 15 points for each 6-letter word she created. Which of the following is not a possible value for the total points Thalia scored?

- F** 37
- G** 46
- H** 58
- J** 59

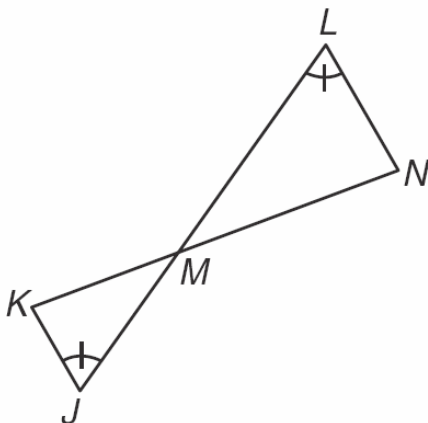
July '06 Obj 10 - # 48

On a certain math problem, Cynthia mistakenly divided a number by 4 and then subtracted 24 and got 12 for her answer. After reading the problem again, she realized that she should have subtracted 24 before dividing by 4. What was the correct answer?

- A** -48
- B** -28
- C** 30
- D** 144

July '06 Obj 10 - # 55

Look at the figure shown below. If $\triangle MKJ \sim \triangle MNL$, which of the following must be true?



July '06 Obj 10 - # 50

A biologist noticed that the population of ladybugs in a sample doubled every 3 days. If the initial population sample was 30 ladybugs, what was the population of ladybugs at the end of 9 days?

- A** 90
- B** 270
- C** 120
- D** 240

Apr '06 Obj 10 - # 17