5.1

Midsegments of Triangles
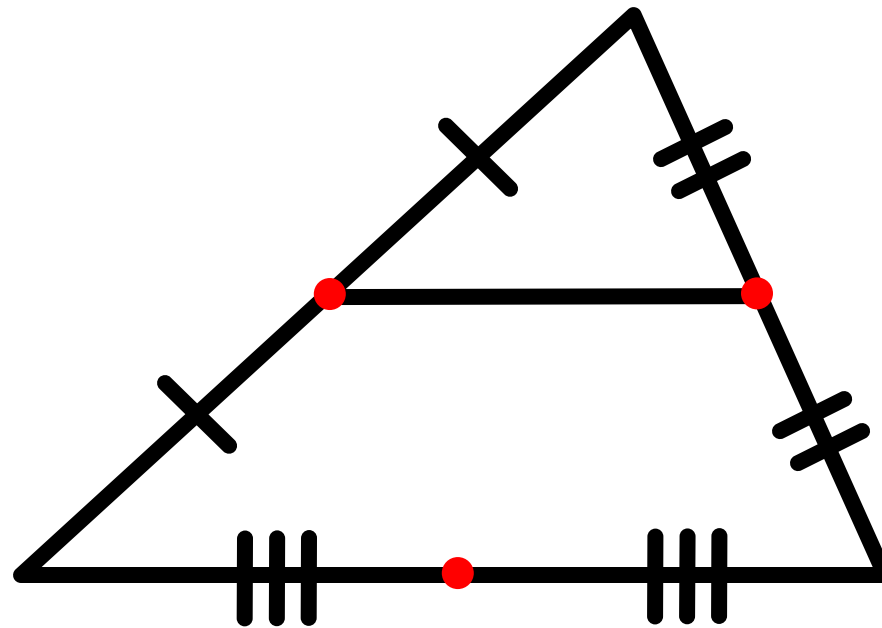
8. As Emily is riding her bicycle on a long straight road, she spots Emerson skating in the same direction 1/2 mile in front of her. After she passes him, she can see him in her rear view mirror until he is 1/2 mile behind her. Emily rides at a constant rate of 12 miles per hour, and Emerson skates at a constant rate of 8 miles per hour. For how many minutes can Emily see Emerson?
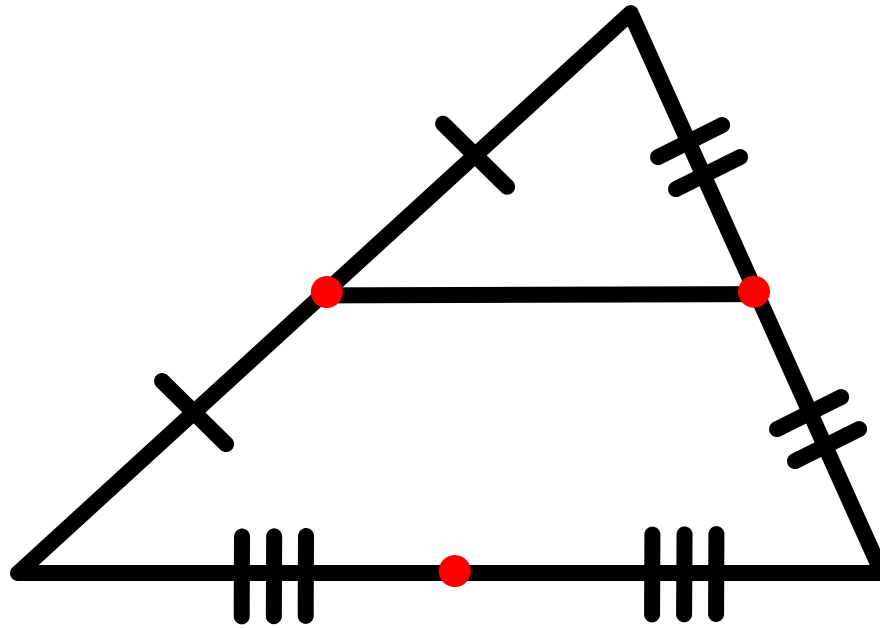
   (A) 6   **(B)** 8   **(C)** 12   **(D)** 15   **(E)** 16

9. Ryan got 80% of the problems correct on a 25-problem test, 90% on a 40-problem test, and 70% on a 10-problem test. What percent of all the problems did Ryan answer correctly?

   (A) 63   **(B)** 75   **(C)** 80   **(D)** 84   **(E)** 86

DEFINITION

MIDSEGMENT
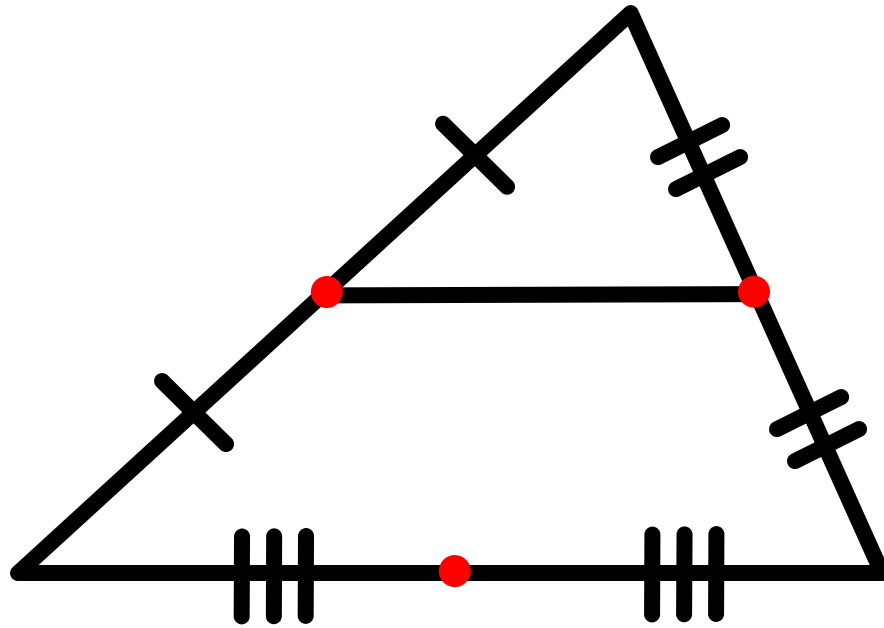
POK

OBSERVATIONS

What are two relationships between a midsegment and the side that doesn't contain it's endpoints?

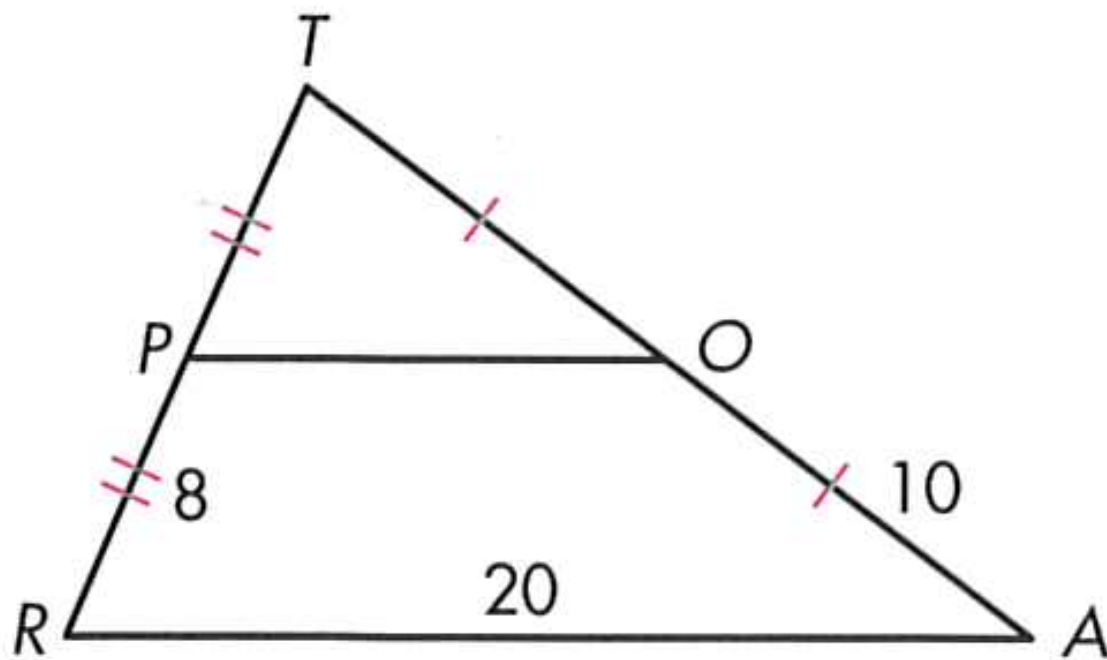1) _____

2) _____

POK

TRIANGLE MIDSEGMENT POSTULATE

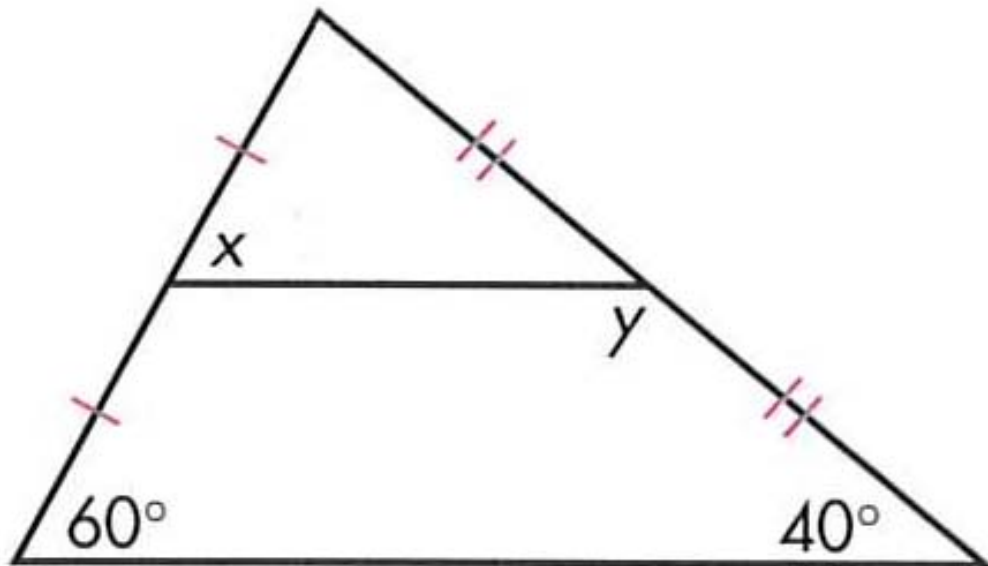**The midsegment is _____ to the _____ side and _____ the length of the _____ side.**

1.* What is the perimeter of
   $\triangle TOP$?
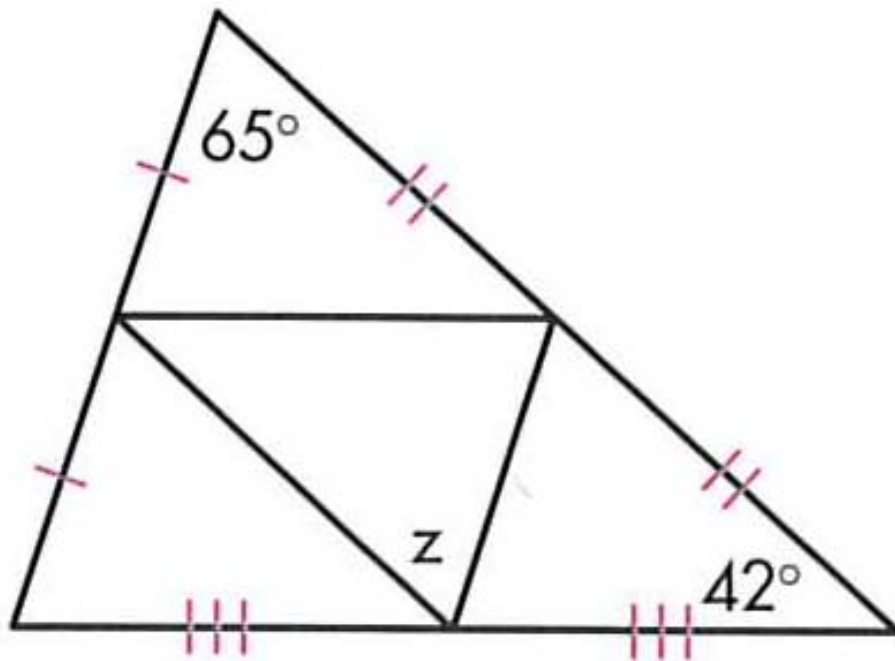
2. $x = $ –?–

$y = $ –?–

PRACTICE

3.* z = –?–

4. What is the perimeter of $\triangle TEN$?