Geometry

6.6 Use Proportionality Theorems

## Triangle Proportionality Theorem

proportional

sides

triangle

side

parallel

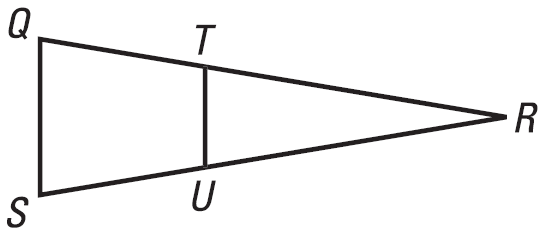
If a line is \_\_\_\_\_\_\_\_\_\_\_ to a \_\_\_\_\_\_\_ of a \_\_\_\_\_\_\_\_\_\_, then it separates the other two \_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_\_\_\_\_ segments.

parallel

Proportional

converse

* And the \_\_\_\_\_\_\_\_\_\_ is also true. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ segments 🡪 line \_\_\_\_\_\_\_\_\_\_ to the third side.

In with chord TU, QR = 10, QT = 2, UR = 6, and SR = 12. Determine if .

🡪 🡪 False, not parallel

proportionally

transversals

parallel

If three or more \_\_\_\_\_\_\_\_\_\_\_\_ lines intersect two \_\_\_\_\_\_\_\_\_\_\_\_\_\_, then they cut off the transversals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Each of these is a property lot along a lake. How much waterfront land does each property have?

b

a

c

d

e

10

5

15

30

35

40

40

ratio

opposite

bisector

angle

An \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ in a triangle separates the \_\_\_\_\_\_\_\_\_\_\_ side into segments that have the same \_\_\_\_\_\_\_\_\_ as the other two sides.

Find x

12

18

10

x

Assignment: 400 #2-18 even, 22, 24, 28, 30-36 even = 16