DO NOW

GEOMETRY · 5 MINUTES · START RIGHT AWAY

Lesson 7-4f # Apply Geometric Mean to Find a Distance

Name _____ Date _____ Per _____

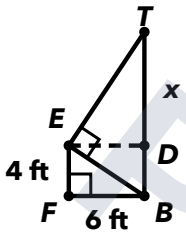
1 FLUENCY

Ray's eyes are 6 ft above the ground, 12 ft from a wall. Sighting along a right angle, he sees the top and bottom of the wall. Find the wall's height above his eyes, then the total height.

above eyes: ☐ total: ☐

2 VISUAL MODEL

Eli sights the top *T* and base *B* of a pole along a right angle at eye level *E*.



ED = ☐ *DB* = ☐

$ED^2 = DB \cdot x \rightarrow x =$ ☐

pole height = ☐

3 APPLICATION

To find distance *AB* across a pond, a surveyor makes a right angle at *C* and drops altitude *CD* = 24 m onto *AB*, with *AD* = 18 m. Find *DB* and *AB*.

DB = ☐ *AB* = ☐

WORK

4 REASONING

Lena's eyes are 5 ft high and she stands 15 ft from a tree. Using a right-angle sight, she says the tree is 45 ft tall. Find her error and the correct height.

correct height = ☐

_____

*We don't divide our effort, we **multiply** it!*

✎ Show your work ✓ Check your work ★ Try your best

PREVIEW PREVIEW PREVIEW