

Answers to “Test Yourself” No. 17

Third the Triangle

Dr. Richard L. Elgin, PLS, PE
Elgin Surveying & Engineering, Inc.
Rolla, Missouri

$$\text{Area ADE} = \frac{1}{2} (300) (x) (\sin \theta) = \left(\frac{1}{3}\right) \left(\frac{1}{2}\right) (480) (400) (\sin \theta)$$

Cancel the $\sin \theta$'s

$$x = 213.33 \text{ feet}$$

(And you thought this was going to be a tough problem!)