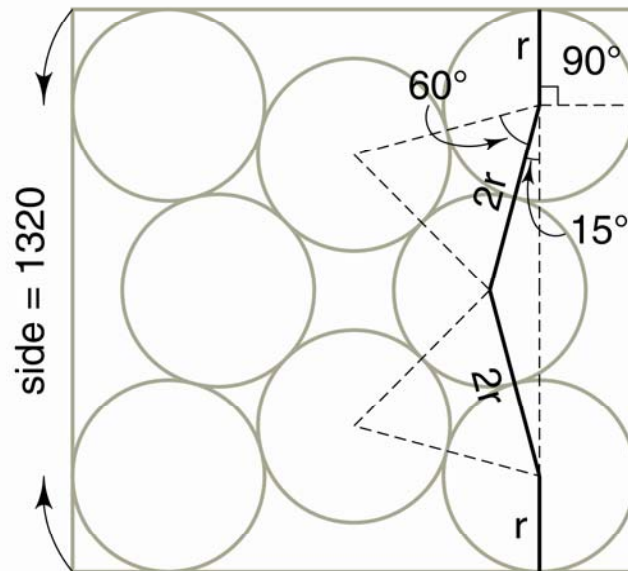


## Answer to “Test Yourself” No. 21

### Crop Circles

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



$$40 \text{ acres} = 1,742,400 \text{ ft}^2, \text{ side} = \sqrt{1742400 \text{ ft}^2} = 1320 \text{ feet}$$

$$1320 \text{ feet} = r + r + 2r(\cos 15^\circ) + 2r(\cos 15^\circ)$$

$$1320 \text{ feet} = 5.8637r$$

$$r = 225.114 \text{ feet}$$