

# Connections

24. **Multiple Choice** Which set of irrational numbers is in order from least to greatest?

A.  $\sqrt{2}, \sqrt{5}, \sqrt{11}, \pi$  <sup>3.14</sup>

B.  $\sqrt{2}, \sqrt{5}, \pi, \sqrt{11}$

C.  $\sqrt{2}, \pi, \sqrt{5}, \sqrt{11}$

D.  $\pi, \sqrt{2}, \sqrt{5}, \sqrt{11}$

1.41, 2.23, 3.14, 3.32

Find the two consecutive whole numbers the square root is between. Explain.

25.  $\sqrt{39}$  6, 7

26.  $\sqrt{600}$  24, 25

Tell whether the statement is true or false. Explain.

27.  $0.06 = \sqrt{0.36}$  <sup>0.6</sup> False

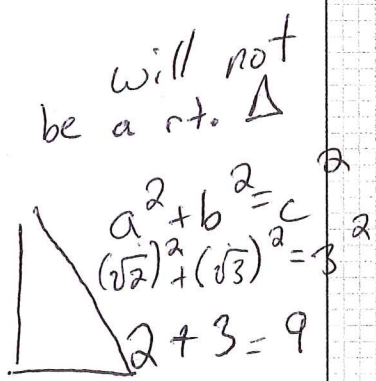
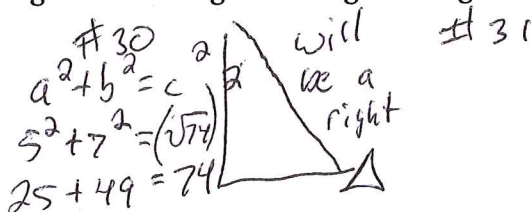
28.  $1.1 = \sqrt{1.21}$  True

29.  $20 = \sqrt{40}$  False

Tell whether a triangle with the given side lengths is a right triangle. Explain how you know.

T 30. 5 cm, 7 cm,  $\sqrt{74}$  cm

F 31.  $\sqrt{2}$  ft,  $\sqrt{3}$  ft, 3 ft  
a b c



Estimate the square root to one decimal place *without* using the  $\sqrt{\quad}$  key on your calculator. Then, tell whether the number is *rational* or *irrational*.

32.  $\sqrt{121}$  11 Rational

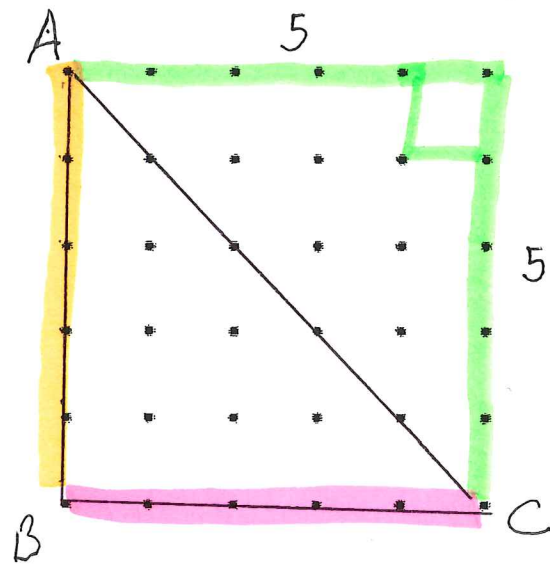
33.  $\sqrt{0.49}$  = 0.7 R

34.  $\sqrt{15}$  Irr.

35.  $\sqrt{1,000}$  R

crazy decimal

Terminating decimal



Distance for AB 5

Distance for BC 5

Distance for AC, must create a rt.  $\Delta$

$$a^2 + b^2 = c^2$$

$$5^2 + 5^2 = c^2$$

$$25 + 25 = c^2$$

$$50 = c^2$$

$$c = \sqrt{50}$$