

$$\textcircled{9} \sqrt{36} = 6 \quad \textcircled{10} \sqrt{169} = 13 \quad \textcircled{11} \sqrt{16} = 4 \quad \textcircled{12} \sqrt{900} = 30$$

$$\textcircled{13} \sqrt{\frac{36}{49}} \quad \begin{array}{l} \text{get the square root of the numerator } \underline{6} \\ \text{get the square root of the denominator } \underline{7} \end{array}$$

$$\textcircled{14} \sqrt{\frac{25}{81}} = \frac{5}{9} \quad \textcircled{19} \sqrt{17} \quad \begin{array}{l} 4^2 = 16 \quad 16 \text{ is closer to } 17 \text{ than is } 25, \text{ so} \\ 5^2 = 25 \quad \text{we estimate the } \sqrt{17} \text{ to be } 4 \end{array}$$

$$\textcircled{20} \sqrt{35} \quad \begin{array}{l} 5^2 = 25 \\ 6^2 = 36 \end{array} \quad 35 \text{ is closer to } 36, \text{ so we estimate } \sqrt{35} \text{ to be } 6$$

$$\textcircled{22} \sqrt{61} \quad \begin{array}{l} 8^2 = 64 \\ 7^2 = 49 \end{array} \quad \text{estimate} = 8$$

$$\textcircled{27} \frac{2}{3} \text{ rational}$$

$$\textcircled{34} \sqrt{144} = 12 \text{ natural, whole, integer, rational}$$

$$\textcircled{28} 13 \text{ natural, whole, integers, rational}$$

$$\textcircled{35} \sqrt{113} \text{ irrational}$$

$$\textcircled{29} -1 \text{ integers, rational}$$

$$\textcircled{36} \frac{59}{2} = 29.5 \text{ rational}$$

$$\textcircled{30} -\frac{19}{100} \text{ rational}$$

$$\textcircled{31} \pi \text{ irrational}$$

$$\textcircled{37} 5\frac{2}{3} > \sqrt{29}$$

$$\textcircled{32} -2.38 \text{ rational}$$

$$5.67 \quad 5.38$$

$$\textcircled{33} \frac{17}{4573} \text{ rational}$$

$$\textcircled{38} -3.1 > -\frac{16}{5}$$

$$-3.1 \quad < 3.2$$

45) $\frac{1}{2}, -2, \sqrt{5}, -\frac{7}{4}, 2.4$

~~0.5, -2, 2.3, -1.75, 2.4~~ change them all to decimals

-2, -1.75, 0.5, 2.3, 2.4 order them

$-2, -\frac{7}{4}, \frac{1}{2}, \sqrt{5}, 2.4$ place original numbers in order

46) $-3, \sqrt{31}, \sqrt{11}, 5.5, -\frac{60}{11}$

~~-3, 5.56, 3.31, 5.5, -5.45~~

-5.45, -3, 3.31, 5.5, 5.56

$-\frac{60}{11}, -3, \sqrt{11}, 5.5, \sqrt{31}$

47) $-6, \sqrt{20}, 4.3, -\frac{59}{9}$

~~-6, 4.47, 4/3, -6.56~~

-6.56, -6, 4.3, 4.47

$-\frac{59}{9}, -6, 4.3, \sqrt{20}$