

Are You Ready? Possible Solutions

1. The chart should look like the following.

Number	Rational or Irrational
$0.\overline{3}$	rational
π	irrational
0.6	rational
8	rational
-5.25	rational
$\sqrt{25}$	rational
$\sqrt{5}$	irrational
$2\frac{2}{3}$	rational
-8	rational
1.404 004 004 . . .	irrational
4^2	rational
0.142 857 142 857 1 . . .	rational

2. a. ii
b. i
c. iii
3. a. The following set includes all real numbers with the exception of **-1** and **2**.
b. The following set of real numbers is described in words as **the set of real numbers between -2 and 5, not including -2 but including 5**.
c. The following set of real numbers is described in words as **the set of real numbers less than or equal to 3**.
d. The following set of real numbers is described in words as **the set of real numbers strictly between -1 and 1, as well as those real numbers strictly greater than 2**.
4. a. amount of energy used
b. day of the year
c. number of tickets sold
d. duration of exercise
e. height