Betsy McCall KEY

For each element in the set $\left\{5, -3, \frac{1}{2}, 0, \sqrt{11}, -|-4|, \frac{38}{19}, 4\frac{2}{3}, 0.\overline{389}, \sqrt{64}, 0.4041424344..., \sqrt{-2}, \frac{\pi}{2}, \frac{1}{\sqrt{5}}\right\}$, indicate which set the number belongs to in the table.

Number	Natural Number	Whole Number	Integer	Rational Number	Irrational Number	Real Number	None of these
5	✓	✓	✓	✓		✓	
-3			✓	✓		✓	
1/2				✓		✓	
0		✓	✓	✓		✓	
$\sqrt{11}$					✓	✓	
$-|-4|$ = -4			✓	✓		✓	
38/19 = 2	✓	✓	✓	✓		✓	
$4\frac{2}{3}$				✓		✓	
$0.\overline{389}$ = $\frac{389}{999}$				✓		✓	
$\sqrt{64}$ = 8	✓	✓	✓	✓		✓	
0.4041424344...					✓	✓	
$\sqrt{-2}$							✓
$\frac{\pi}{2}$					✓	✓	
$\frac{1}{\sqrt{5}}$					✓	✓	

Give an example of a number that fits the following criteria (if it's possible):

a. A number which is both a rational number and an integer

-3

b. A number which is both real and irrational

$\pi/2$

c. A number which is irrational and an integer

not possible

d. A number which is a counting number but not an integer   =natural

5

e. A number which is not a real number

$\sqrt{-2}$ or $\frac{2}{0}$