

Section 1.1 Focus Exercises

1. Find the absolute value of each number, as indicated.

a) $|12| =$

b) $|0| =$

c) $|-9| =$

d) $\left| -\frac{3}{5} \right| =$

e) $|-2.5| =$

f) $|\sqrt{10}| =$

2. Write each decimal number as a fraction, thereby making it a rational number. Simplify the fraction completely.

a) $.03 =$

b) $7.5 =$

c) $-0.105 =$

3. Write each repeating decimal as a fraction; reduce the fraction if possible.

a) $.8888888\dots$

b) $.\overline{45}$

c) $.\overline{216}$

d) $.72727272\dots$

e) $.\overline{06}$

f) $.540540540\dots$

4. Decide whether each number is rational or not. *State why it is or is not.*

a) $-\frac{4}{5}$

b) $\frac{0}{4}$

c) $2.031031031031\dots$

d) $5.1929394959\dots$

e) 0.590143776

5. Decide into which category or set of the real numbers each fits. Put a check mark in the box(es) that describe that number. Check all that apply.

		Natural	Whole	Integer	Rational	Irrational	Undefined	Real
a)	- 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	8.2395071...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	$-\frac{6}{7}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	π	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e)	$\frac{2}{0}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f)	$3.\overline{14}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g)	$\frac{9}{3}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h)	$\sqrt{6}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i)	$\frac{0}{3}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j)	$-\sqrt{25}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>