

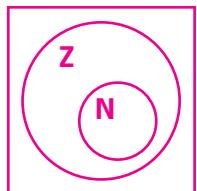
NAME \_\_\_\_\_

DATE \_\_\_\_\_

# Module Test A

Module 1

1. From the set  $\{-4, -\pi, -2.2, -\frac{3}{4}, 0, \frac{1}{2}, \sqrt{7}, \sqrt{25}\}$ ,
  - a. Name all integers. -4, 0,  $\sqrt{25}$
  - b. Name all rational numbers.  $-4, -2.2, -\frac{3}{4}, 0, \frac{1}{2}, \sqrt{25}$
  - c. Name all real numbers.  $-4, -\pi, -2.2, -\frac{3}{4}, 0, \frac{1}{2}, \sqrt{7}, \sqrt{25}$
  - d. Name all irrational numbers.  $-\pi, \sqrt{7}$
  - e. Name all whole numbers. 0,  $\sqrt{25}$
2. In the space below, draw a Venn diagram illustrating the relationship between the natural numbers and the integers.



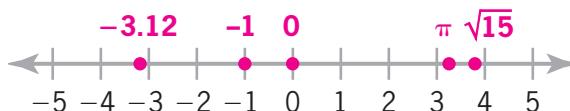
3. If possible, name a whole number that is *not* a natural number.

0

4. Identify all the sets of numbers to which each of the following belong:

- a. 7.3 rational, real
- b. -2 integer, rational, real
- c.  $-\pi$  irrational, real
- d.  $-\frac{5}{3}$  rational, real
- e. 0 whole, integer, rational, real

5. In the space below, graph on a number line  $-3.12, -1, 0, \pi, \sqrt{15}$ .



Simplify, if possible.

6.  $-7 + 12$

**5**

8.  $(-5)(-7)$

**35**

10.  $5 + (-9) + 1 + (-10)$

**-13**

12.  $-3.2 - 4.5$

**-7.7**

14.  $\left(-\frac{7}{11}\right) \div \left(-\frac{35}{22}\right)$

**$\frac{2}{5}$**

16.  $-3^2$

**-9**

18.  $\sqrt[3]{-64}$

**-4**

20.  $\sqrt{-1}$

**not a real number**

22.  $3^3 - 2^2$

**23**

24.  $5[2(3 - 6)] \div 3(\sqrt{4})$

**-5**

7.  $5 - (-3)$

**8**

9.  $\frac{-12}{0}$

**undefined or not possible**

11.  $\left(-\frac{3}{4}\right) + \left(-\frac{5}{8}\right)$   
 **$-\frac{11}{8}$  or  $-1\frac{3}{8}$**

13.  $(12.5)(-1.2)$

**-15**

15.  $\left(\frac{5}{7}\right)\left(-\frac{7}{15}\right)\left(0\right)\left(-6\right)\left(\frac{33}{49}\right)$   
**0**

17.  $-\sqrt{49}$

**-7**

19.  $(-5)^3$

**-125**

21.  $5 - 3(2 - 7)$

**20**

23.  $\frac{12 - 2(-5)}{-9 - 2}$

**-2**

25.  $11 + 3\{-2(5|2 - 9|) + \frac{15}{3}\} \div 5$

**-28**