

NAME _____

DATE _____

Module 1 Getting Ready for Algebra
Lesson 1 Defining Sets and Real Numbers



**additional
practice**

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

- | | | | |
|---------------|--------------|--------------------------|---------------------|
| 1. -5 _____ | 2. 6 _____ | 3. $-4\frac{2}{5}$ _____ | 4. $\sqrt{3}$ _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

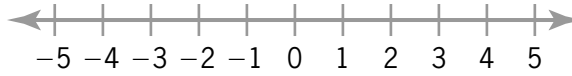
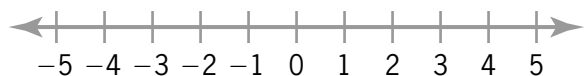
If possible give an example of a number that is . . .

5. a whole number but not a natural number. _____
6. both a whole number and an irrational number. _____
7. both a natural number and an integer. _____
8. both an integer and a rational number. _____
9. both a natural number and a real number. _____
10. both a natural number and an irrational number. _____
11. a rational number but not a whole number. _____
12. a whole number but not a rational number. _____

Graph the numbers on the number line provided.

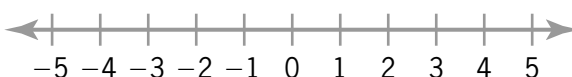
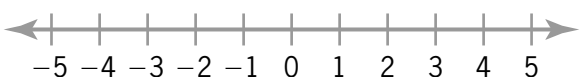
13. 0.5 , -0.3 , -2.5 , $\frac{1}{6}$, -1 , and π

14. -1 , $\frac{1}{2}$, -0.2 , $\sqrt{3}$, and -2



15. $\frac{1}{4}$, $-\pi$, -0.6 , $\frac{7}{6}$, and $-2\frac{3}{4}$

16. 2 , -1.75 , $\frac{4}{5}$, -3.1 , and $\frac{\pi}{2}$



Determine whether each statement is *true* or *false*. If a statement is false, provide an example to show that it is false.

17. The product of two integers is also an integer.

18. The sum of two irrational numbers is also

an irrational number. _____

19. The quotient of two natural numbers is also

a natural number. _____

20. The difference of two rational numbers is also

a rational number. _____

To describe each of the following examples, identify the most reasonable set of numbers from which to choose.

21. Your normal body temperature:

22. Temperatures at the North Pole:

23. Circumference of a circular hot tub divided by its diameter:

24. A student's algebra test average:

25. Price of a music CD plus sales tax:

26. Score from a football game:

27. Baseball batting average:

28. Car odometer reading:

29. Change in stock market prices:

30. The square root of 19:

