

HOMEWORK FOR GRADE 8 (MATH)

Sets of Real Numbers and Ordering of Real Numbers

The Number System

Identify the sets to which each of the following numbers belongs by marking an “X” in the appropriate boxes.

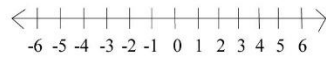
	Number	Natural Numbers	Whole Numbers	Integers	Rational Numbers	Irrational Numbers	Real Numbers
1.	$-\sqrt{17}$						
2.	-2						
3.	$-\frac{9}{37}$						
4.	0						
5.	-6.06						
6.	$4.5\overline{6}$						
7.	$3.050050005\dots$						
8.	18						
9.	$\frac{-43}{0}$						
10.	π						
11.	$\overline{.634}$						
12.	$\sqrt{225}$						
13.	$.634$						
14.	$\sqrt{\frac{4}{49}}$						
15.	$-\sqrt{64}$						

	Number	<u>N</u> atural Numbers	<u>W</u> hole Numbers	<u>I</u> ntegers	<u>R</u> ational <u>N</u> umbers	<u>I</u> rrational <u>N</u> umbers	<u>R</u> eal Numbers
16.	$\sqrt{13}$						
17.	-5						
18.	$\frac{2}{3}$						
19.	-0.083						
20.	27						
21.	$2.\overline{647}$						
22.	$3.\overline{0505}$						
23.	-198						
24.	$-\frac{1}{2}$						
25.	10						

The Real Number Line Worksheet

Graph the number on the real number line.

1. $3\frac{1}{2}$



3. -4.5



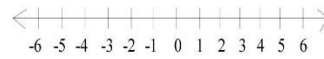
5. $\sqrt{17}$



7. $-\sqrt{24}$



2. $-2\frac{1}{2}$



4. 0.5



6. $-\sqrt{10}$



8. $\sqrt{15}$



Graph.

9. the real numbers greater than 4



10. the real numbers greater than 1



11. the real numbers less than 0



12. the real numbers greater than -2



13. the real numbers less than -3



14. the real numbers less than 5



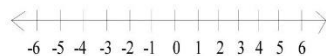
15. the real numbers less than -4



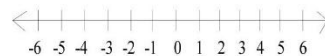
16. the real numbers less than -2



17. the real numbers between 2 and 6



18. the real numbers between -3 and 1



19. the real numbers between -5 and -1



20. the real numbers between -3 and 0



Solve.

21. For the inequality $x \geq 6$, which numbers listed below make the inequality true?

- a. -2.6 b. 0 c. 6 d. $\sqrt{83}$

22. For the inequality $x < 3$, which numbers listed below make the inequality true?

- a. $-\sqrt{21}$ b. 0 c. 3 d. 3.02

23. For the inequality $x \leq -5$, which numbers listed below make the inequality true?

- a. 6 b. -5 c. 0 d. $-\sqrt{5}$

24. For the inequality $x \geq -2$, which numbers listed below make the inequality true?

- a. -5 b. -2 c. -1.6 d. $\sqrt{3}$

What values of the variable x make the inequality true?

25. $x > 4$

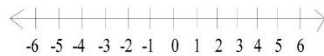
26. $x < -3$

27. $x \leq -6$

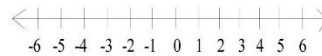
28. $x \geq 2$

Graph the inequality on the real number line.

29. $x > -3$



30. $x < 5$



31. $x \geq 0$



32. $x \leq -4$



33. $x < -1$



34. $x \geq 3$



35. $x \leq 1$



36. $x > -2$

