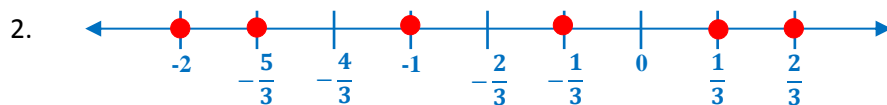


Real Numbers and the Number Line Assignment

Name the coordinates of the points graphed on each number line.



Graph each set of numbers.

3. $\left\{-\frac{1}{2}, 0, \frac{1}{4}, \frac{3}{4}, \frac{5}{4}\right\}$



4. $\{-1.4, -0.6, 1.8, 3.2, 4.5\}$



Find each absolute value.

5. $|-20|$

6. $|19|$

7. $|2.5|$

8. $\left|-\frac{1}{5}\right|$

9. $|-83|$

10. $|10|$

11. $|79|$

12. $|-16|$

Evaluate each expression if $x = 8$, $y = 14$, and $z = -0.67$.

13. $6.5 - |8.4 - z|$

14. $7.4 + |z - 2.6|$

15. $|-z| + (x + 3.2)$

Real Numbers and the Number Line Assignment

16. $91 + |21 - y|$

17. $|x| + 13 - 4$

18. $2.8 - 1.3 + |z|$
 $= 2.17$

19. $|z| - 0.22$

20. Place each numbers in the most SPECIFIC categories of real numbers they belong.

-16 -7 $-\frac{2}{5}$ 35 $\frac{3}{2}$ $-\frac{5}{9}$ 0.66 50 9.82 -69.99

a) **Real Numbers** :

b) **Irrational Numbers** :

c) **Rational Numbers** :

d) **Non-integers** :

e) **Integers** :

f) **Negative Numbers** :

g) **Whole Numbers** :

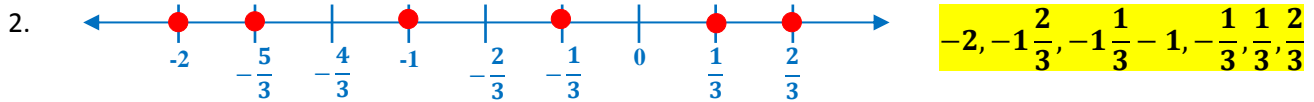
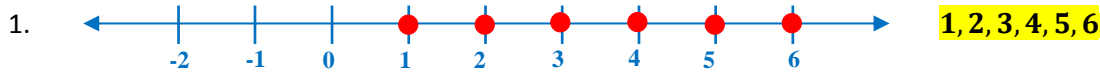
h) **Zero** :

i) **Natural Numbers** :

Real Numbers and the Number Line Assignment

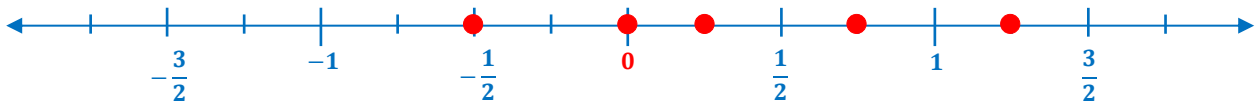
ANSWER

Name the coordinates of the points graphed on each number line.



Graph each set of numbers.

3. $\{-\frac{1}{2}, 0, \frac{1}{4}, \frac{3}{4}, \frac{5}{4}\}$



4. $\{-1.4, -0.6, 1.8, 3.2, 4.5\}$



Find each absolute value.

5. $|-20| = 20$

6. $|19| = 19$

7. $|2.5| = 2.5$

8. $|\frac{1}{5}| = \frac{1}{5}$

9. $|-83| = 83$

10. $|10| = 10$

11. $|79| = 79$

12. $|-16| = 16$

Evaluate each expression if $x = 8$, $y = 14$, and $z = -0.67$.

13. $6.5 - |8.4 - z|$
 $= 6.5 - |8.4 - (-0.67)|$
 $= 6.5 - |8.4 + 0.67|$
 $= 6.5 - 8.67$
 $= -19.67$

14. $7.4 + |z - 2.6|$
 $= 7.4 + |-0.67 - 2.6|$
 $= 7.4 + |-3.27|$
 $= 7.4 + 3.27$
 $= 77.27$

15. $|-z| + (x + 3.2)$
 $= | -(-0.67) | + (8 + 3.2)$
 $= |0.67| + 11.2$
 $= 0.67 + 11.2$
 $= 11.87$

16. $91 + |21 - y|$
 $= 91 + |21 - 14|$
 $= 91 + 7$
 $= 98$

17. $|x| + 13 - 4$
 $= |8| + 13 - 4$
 $= 8 + 9$
 $= 17$

18. $2.8 - 1.3 + |z|$
 $= 2.8 - 1.3 + |-0.67|$
 $= 1.5 + 0.67$
 $= 2.17$

Real Numbers and the Number Line Assignment

19. $|z| - 0.22$
 $= |-0.67| - 0.22$
 $= 0.67 - 0.22$
 $= 0.45$

20. Place each numbers in the most specific categories of real numbers they belong.

-16	-7	$-\frac{2}{5}$	35	$\frac{3}{2}$	$-\frac{5}{9}$	0.66	50	9.82	-69.99
j)	Real Numbers	:	$-\frac{2}{5}, -\frac{5}{9}, -69.99, \frac{3}{2}, 0.66, 9.82, -16, -7, 35, 50$						
k)	Irrational Numbers	:							
l)	Rational Numbers	:	$-\frac{2}{5}, -\frac{5}{9}, -69.99, \frac{3}{2}, 0.66, 9.82, -16, -7, 35, 50$						
m)	Non-integers	:	$-\frac{2}{5}, -\frac{5}{9}, -69.99, \frac{3}{2}, 0.66, 9.82$						
n)	Integers	:	$-16, -7, 35, 50$						
o)	Negative Numbers	:	$-16, -7$						
p)	Whole Numbers	:	$35, 50$						
q)	Zero	:							
r)	Natural Numbers	:	$35, 50$						