

## Math 7 Practice Test: Rational Numbers

Name:

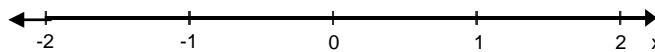
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1. Define and give an example of a *reciprocal*.
  
  
  
  
  
  
  
  
  
  
2. Define *fraction*.
  
  
  
  
  
  
  
  
  
  
3. Define *rational numbers*.
  
  
  
  
  
  
  
  
  
  
4. Identify two different real world example in which opposite quantities combine to make 0.

5. Graph the following numbers on the number line. Label each point.

-1.7, 0.019, 2,  $\frac{-2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{-3}{2}$ ,



6. In which set are the numbers all between 0.7 and 1.86?

A.	0.45, 2, 1.84
B.	0.699, 1.206, 1.85
C.	0.72, 1.37, 1.88
D.	0.78, 1.04, 1.854

7. Which set of numbers is in order from least to greatest?

A.	$-0.23, \frac{-1}{3}, -0.3, \frac{-2}{7}$
B.	$\frac{-1}{3}, -0.3, \frac{-2}{7}, -0.23$
C.	$-0.23, \frac{-2}{7}, \frac{-1}{3}, -0.3$
D.	$\frac{-2}{7}, \frac{-1}{3}, -0.3, -0.23,$

8. Draw a model to solve  $\frac{2}{3} - \frac{1}{2} =$

9. Draw a model to solve  $\frac{2}{3} \div \frac{1}{6} =$

10. Write the algorithm for DIVIDING decimals.

11. Compare the algorithm for subtracting fractions to the algorithm for subtracting decimals.

Simplify problems 12 – 19. Show your work.

12.  $15.1234 + (-6) + (-4.07) =$

13.  $39 - 1.8 =$

14.  $-9.8(0.027) =$

15.  $.008 \overline{) -5.2}$

$$16. \left(-3\frac{3}{4}\right) + \left(-2\frac{7}{8}\right) =$$

$$17. \left(-\frac{3}{4}\right)\left(-\frac{10}{21}\right) =$$

$$18. \left(2\frac{1}{4}\right) \div \left(-\frac{3}{16}\right) =$$

$$19. \left(3\frac{1}{3}\right)\left(-4\frac{1}{5}\right) =$$

20.

(SBAC) Identify the number(s) that makes each statement true. You may select more than one number for each statement.

$$-3.2 + \square = \text{a negative number}$$

-5.2       4.9

$$\square - 2\frac{3}{5} = \text{a positive number}$$

$\frac{16}{5}$         $-\frac{7}{4}$

$$\square - 3 = \text{zero}$$

-3       3

$$4.23 - \square = \text{a negative number}$$

-4.75       -1.78

21. Kevin's regular rate of pay is \$4 per hour. When he works overtime, he earns  $1\frac{1}{2}$  times as much per hour. How much will Kevin earn for  $5\frac{1}{2}$  hours of overtime work?



26. Convert  $\overline{.3}$  to a **simplified** fraction.

- A.  $\frac{3}{10}$
- B.  $\frac{3}{9}$
- C.  $\frac{3}{5}$
- D.  $\frac{1}{3}$

27. Convert  $\frac{5}{12}$  to a decimal. Show your work.

**Long Term Memory Review**

28. Simplify:  $\frac{4(7+2)}{-3^2}$

29. a.  $-3 + 10 - (-5) =$

b.  $-34 - 17 =$

30. a.  $(-7)(5)(3)(-2)(-1) =$

b.  $-8,540 \div (7) =$