

MasterMath

Name _____

Date _____

Rational and Irrational Numbers

1. Find the mean of this data set: 6, -8, 12, -10, -9, 3

2. Simplify these expressions:

Expression	Simplified
$(4x - 6) \div 2$	
$(-5a + 15) \div -5$	
$(-3z - 9) \div -\frac{1}{3}$	
$(8z - 4) \div -2$	

3. Evaluate this expression when $x = -6$ and $y = -3$

$$\frac{-x - 4y}{xy}$$

4. Five skin divers each attempt to reach a deep reef in the Florida Keys. Their depths in feet below sea level were as follows: -28, -37, -18, -45, -62. What was the mean depth reached?

5. Is this number Rational or Irrational? Explain
.4968535743685221875....

6. Are these two expressions equivalent? Explain.

$(-6 + 3) \div \frac{1}{4}$

$(-3)4$

7. Six professional golfers played a round of golf at The Parboil Golf Club. Their scores relative to par were as follows: two were +1; three were -2; and one shot a -4. What was their average score relative to par?



8. Is 1.5 a rational number? Explain.

9. The temperature was pretty cold last week in Deluth. Based upon this table, what was the mean minimum temperature?

Number of Days	1	4	2
Minimum Temperature	-3°	-9°	2°