Numbers and negative numbers

worksheet

1. Indicate which classifications apply to each number in the table.

Number	Real	Rational	Irrational	Integer	Whole	Natural
-2	Yes	Yes		Yes		
0	Yes	Yes		Yes	Yes	
1/2	Yes	Yes				
π	Yes		Yes			
2	Yes	Yes		Yes	Yes	Yes

2. Let a represent some number that's not equal to 0. Of the operations being done to a, which of the following will keep their identity? Circle all that apply.

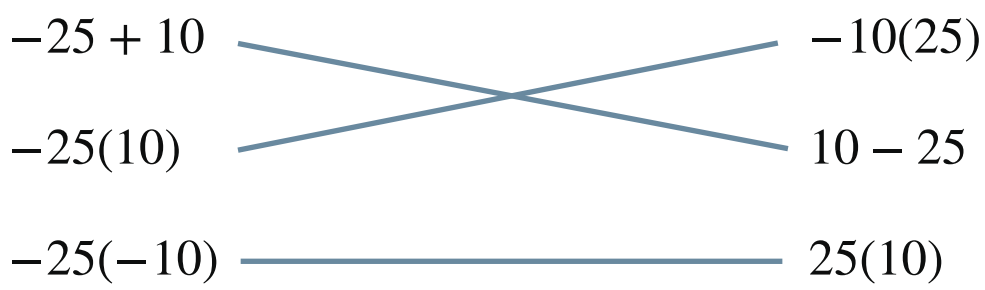
$a + 0$ (circled)

$a + a$

$a \times 0$

$a \times 1$ (circled)

3. Match each expression on the left with its equivalent value on the right.



4. Put the following absolute value expressions in order from least to greatest.

$|-2+4|$ $|-2|+|4|$ $-|-2|-|4|$ $|-2\times 4|$

$-|-2|-|4|=-6$ $|-2+4|=2$ $|-2|+|4|=6$ $|-2\times 4|=8$

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KEY POINTS	NOTES
Real number system	Includes both rational and irrational numbers.
Rational numbers	The set of numbers that can be written as fractions. In decimal form, they repeat or terminate. Ex: $\frac{1}{2} = 0.5$ or $\frac{1}{3} = 0.\bar{3}$
Integers	The set of positive and negative whole numbers. Ex: $\ldots\ -3,\ -2,\ -1, 0, 1, 2, 3,\ \ldots$
Whole numbers	The set of positive integers including 0. Ex: $0, 1, 2, 3,\ \ldots$
Natural numbers	The set of positive integers, also called counting numbers. Ex: $1, 2, 3,\ \ldots$
Identity of addition	$a + 0 = a$
Identity of multiplication	$a \times 1 = a$
Opposite of a number	The positive or negative version of the same number. Ex: 4 and -4 are opposites.
Absolute value	The distance away from 0 on a number line. Ex: $\lvert -5 \rvert = 5$