

Pre-Algebra Workbook

Numbers and negative numbers



NUMBER SETS

■ 1. The number 0 is included in all the number sets except ______numbers.

■ 2. Positive and negative whole numbers are called ______.

■ 3. Fractions and decimals can be considered _____ numbers.

 \blacksquare 4. The number set $\{2,4,6,8\}$ shows a set of _____ numbers.

■ 5. What is the real number that's halfway between 1 and 2?

■ 6. The number sets that include negative numbers are _______, ______, and ______ numbers.

IDENTITY NUMBERS

■ 1. Find the sum.

$$4 + 0 =$$

■ 2. Find the product.

 \blacksquare 3. The identity number for addition is 0 because when we add 0 to a number the value does _____ change.

■ 4. The _____ number for multiplication is 1 because when we multiply a number by 1, the value does not change.

■ 5. Given the problem 10 + 0 = 10, the 0 is the identity number for .

■ 6. Given the problem $20 \cdot 1 = 20$, the 1 is the identity number for

OPPOSITE OF A NUMBER

- 1. What is the opposite of -15?
- \blacksquare 2. What is the opposite of 2/3?
- 3. Opposites are numbers that are equal distance from ______.
- 4. What is the only number that is its own opposite?
- 5. When looking at a number line, the negative numbers are to the _____ of 0 and the positive numbers are to the _____ of 0.
- 6. We know 5 and -5 are opposite numbers because they are both units away from 0.



ABSOLUTE VALUE

■ 1. Simplify the expression.

$$| -4 |$$

■ 2. Simplify the expression.

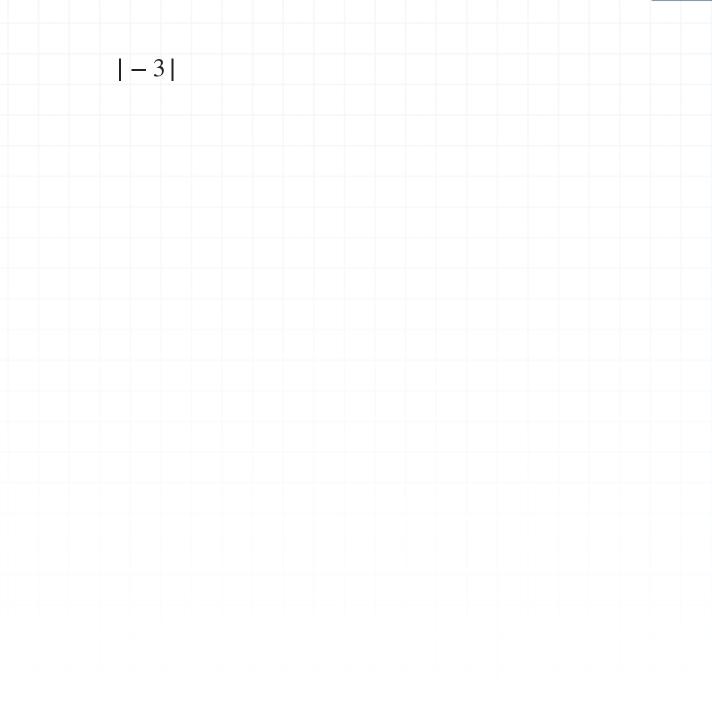
■ 3. Write the numbers from least to greatest.

$$|-4|$$
, $|1|$, $|0|$, $|-8|$, $|9|$

■ 4. Write the values from greatest to least.

$$|7|, |-3|, |0|, |-9|, |5|$$

■ 5. Absolute values make positive numbers _____ and negative numbers _____.





ADDING AND SUBTRACTING SIGNED NUMBERS

■ 1. Simplify the expression.

$$-4 + 2$$

■ 2. Simplify the expression.

$$-11 - 8$$

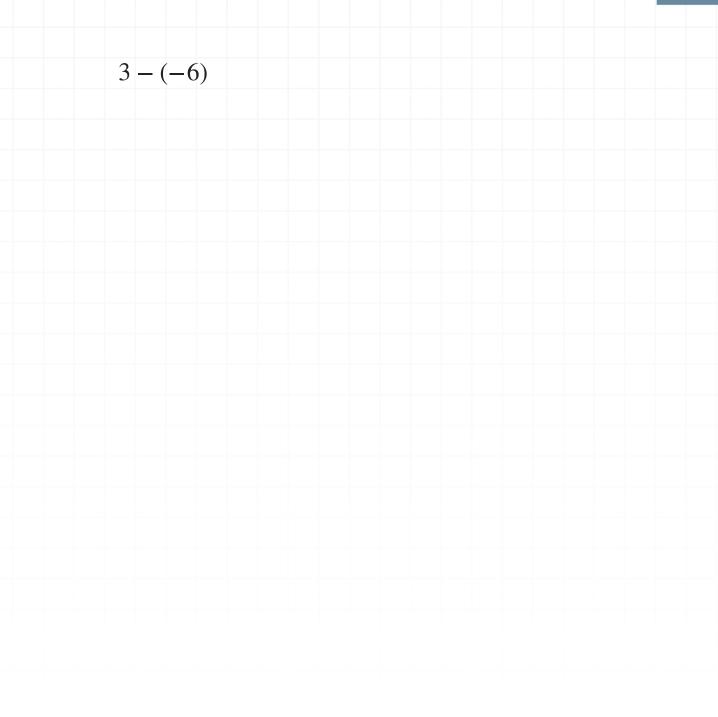
■ 3. When we add two negative numbers, we'll always get a ______number.

■ 4. Simplify the expression.

$$-19 - 26$$

■ 5. Simplify the expression.

$$5 - 8$$





MULTIPLYING SIGNED NUMBERS

- 1. Multiplying two negative numbers will always result in a ______number.
- 2. Multiplying a negative and a positive number will always result in a _____ number.
- 3. Multiplying two positive numbers will always result in a ______number.
- 4. Simplify the expression.

$$12 \cdot -5$$

■ 5. Simplify the expression.

$$-8 \cdot -6$$

■ 6. Simplify the expression.

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DIVIDING SIGNED NUMBERS

- 1. Dividing a negative number by a negative number will always result in a _____ number.
- 2. Dividing a positive number by a negative number will always result in a _____ number.
- 3. Simplify the expression.

$$-12 \div 2$$

■ 4. Simplify the expression.

$$0 \div -8$$

■ 5. Simplify the expression.

$$24 \div -6$$

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ABSOLUTE VALUE OF AN EXPRESSION

■ 1. Simplify the expression.

$$|-6|+|-5\cdot 2|$$

■ 2. Simplify the expression.

$$|-6|-|7|$$

■ 3. Simplify the expression.

$$|-5 \cdot 4|$$

■ 4. Simplify the expression.

$$|-5\cdot-4\cdot2|$$

■ 5. Simplify the expression.

$$|-11+3| \cdot |-9|$$

