## Warm Up

- Solve using commutative and/or associative property.

1) $42+19+8=$
2) $25 \times 6 \times 8=$
3) $12+19+18=$
4) $(13+34)+26=$
5) $5 \times(37 \times 2)=$

Identity and Distributive Properties

## MATH COURSE I

Mrs. Culverwell

## VOCABULARY

Identity Property: (for addition) the sum of zero and any number is that number (for multiplication) the product of 1 and any number is that number
** when a number keeps its identity
2 ways:

1) Adding 0
2) Multiplying 1

Examples: $5+0=5$

$$
12 \times 1=12
$$

## VOCABULARY

Distributive Property: (distribute: to scatter or spread out) when multiplying you can break apart one of the numbers into a sum, then multiply each number in the sum and add the products
** multiplying by a number is the same as multiplying by parts of that number, then adding the results

## BACKGROUND INFO.

## $4 \times 5=20$

Factored form: $4(3+2)=20$ **remember () means to multiply

## Expanded form: 4(3) $+4(2)=20$

## More Examples

1) $4 \times 23=$
2) $10 \times 17=$
3) $4 \times 26=$
4) $8 \times 120=$
5) $3 \times 4.4=$
6) $7 \times 1.3=$
