ORDER OF OPERATIONS

3-1 Basic Operations

Numbers without the multiplication sign are calculated first.

Step 2 1
(Ex.1)
$$28 \div 2(7)$$

= $28 \div 2(7)$ Step1 2(7)
= $28 \div (14)$ Step2 Divide.
= 2

Step 3 2 1
(Ex.2)
$$36 \div 3(5+1)$$
 Step1 Parenthesis
= $36 \div 3(6)$ Step2 3(6)
= $36 \div (18)$ Step3 Divide.
= 2

Follow steps in numerical order to simplify.

(1)
$$6 \div 2(3)$$

= $6 \div ($) step 1 2(3)
= () step 2 Divide.

(6)
$$(42 - 7) \div 7(5) \times 2$$

(2)
$$7 \div 7 \times 2(5)$$

= $7 \div 7 \times ($
= $($

(7)
$$5 \times 20 \div (19 + 6)4$$

(3)
$$8 \div 4 \times 3(2)$$

= $8 \div 4 \times ($
= $($

(8)
$$45 \div 5 \times 3(12 - 7)$$

(4)
$$5 \times 20 \div 4(5)$$

= $5 \times 20 \div ($)
= ()

(9)
$$72 \div (25 - 17) \times 8$$

(5)
$$(3+9)3 \div 4$$

= ()3 ÷ 4
= () ÷ 4
= ()

(10)
$$3 \times 6(2) \div 3(3) - 2$$

EQUATIONS

7-1 Inverse Operations

Inverse Operations

Multiplication ← Division

Using the inverse operation to solve for x

(Ex.1)
$$x \times 5 = 10$$

 $\div 5 = \div 5$
 $x = 2$

Divide both sides by 5 , then 5 will be cancelled.

(Ex.2)
$$x \div 6 = 7$$

 $\times 6 = \times 6$
 $x = 42$

Multiply both sides by 6 , then 6 will be cancelled.

Fill in the blanks with inverse operations.

(1)
$$x \cdot 6 = 18$$

$$6 = 6 \text{ Divide both sides}$$

$$x = 3$$
by 6.

(2)
$$x \cdot 7 = 14$$

$$7 = 7$$

$$x = 2$$
Divide both sides by 7.

(3)
$$x \div 5 = 10$$

$$5 = 50$$
Multiply both sides by 5.

(4)
$$x \div 9 = 11$$

$$9 = 9$$

$$x = 99$$
Multiply both sides by 9.

Using the opposite operations is very helpful. +,- , \times , and \div .

This may be hard, but it's fun.