

$$y-2=1 \rightarrow y-2+2=1+2 \rightarrow y=3$$

Ex.3:  $3w=6 \rightarrow \frac{3w}{3} = \frac{6}{3} \rightarrow w=2$

Ex.4:  $\frac{x}{2}=2 \rightarrow 2(\frac{x}{2})=2 \times 2 \rightarrow x=4$

# 10. EQUATIONS WITH LITERAL COEFFICIENTS.

IF IN THE EQUATION  $x+4=7$ , EACH ARITHMETIC NUMBER IS REPLACED BY A LETTER, THE EQUATION CAN BE WRITTEN:

$$x+a=b$$

WHERE  $a=4$  AND  $b=7$ .

Given:  $x+a=b \rightarrow x+a-a=b-a$

$a-a$  FOR ANY NUMBER.

Let  $a=4$  AND  $b=7$ ,  $x=7-4=3$

# 11. NEGATIVE NUMBERS.

IF  $a=6$  AND  $b=3$ , THEN  $x=3-6 \rightarrow x=-3$

IF EAST IS POSITIVE, WEST IS NEGATIVE.

IF UPSTAIRS IS POSITIVE, DOWNSTAIRS IS NEGATIVE.

A DEBIT CAN BE THOUGHT AS A NEGATIVE CREDIT.

# 12. THE POSITIVE AND NEGATIVE NUMBERS OF ALGEBRA.

SIGNED OR DIRECTED NUMBERS: (ALGEBRAIC NUMBERS)



0 = POINTS CAN BE CHOSEN

# 13. ADDITION, SUBTRACTION, MULTIPLICATION, AND DIVISION OF SIGNED NUMBERS

Ex. of Addition:

1)  $(+4) + (+3) = +7$  FROM  $+4$ , GO UP 3 STEPS

2)  $(+4) + (-3) = +1$  FROM  $+4$ , GO DOWN 3 STEPS

3)  $(-4) + (-3) = -7$  FROM  $-4$ , GO DOWN 3 STEPS

Ex. of Subtraction:

1)  $(+4) - (+3) = +1$

2)  $(+4) - (-3) = +7$

3)  $(-4) - (+3) = -7$

4)  $(-4) - (-3) = -1$

5)  $(0) - (+4) = -4$

6)  $(0) - (-4) = +4$

Ex. of Multiplication:

1)  $(+3)(+4) = +12$

2)  $(+3)(-4) = -12$

3)  $(+3)(-4) = (-4)(+3) = -12 \rightarrow (0 - (+4)) \times 3$

$4 = -4 - 4 - 4 = -12$

4)  $(-3)(-4) = +12$

$4 = +4 + 4 + 4 = +12$

IF FRIEND = POSITIVE, AND ENEMY = NEGATIVE:

1)  $(+3)(+4) = +12$  F OF F IS F

2)  $(+3)(-4) = -12$  F OF E IS E

3)  $(-3)(+4) = -12$  E OF F IS E

2024/04/14