

Dear Parents / Students

Due to the unprecedented situation, Knowledgeplus Training center is mobilized and will keep accompanying and supporting our students through this difficult time. Our Staff will be continuously, sending notes and exercises on a weekly basis through what's app and email. Students are requested to copy the notes and do the exercises on their copybooks. The answers to the questions below will be made available on our website on [knowledgeplus.mu/support/ict/week1.php](http://knowledgeplus.mu/support/ict/week1.php) by 27th March 2020. Please note that these are extra work and notes that we are providing our students and all classes will be replaced during the winter vacation. We thank you for your trust and are convinced that, together, we will overcome these troubled times.

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## **Knowledgeplus Training Center**

### **Mathematics**

### **Garde 7**

### **Week 2**

### **Notes and Exercise**

**Note:(All the Notes, Examples and Exercise are on the photos**

**Note: (Please copy all the Notes, Examples and Exercises on your copy book).**

Mathematics  
Grade 7  
(Notes and exercise) revision.

Representing integers on a number line.

①

②  $>$  = ~~not~~ greater than  
 $<$  = less than

Exercise Example

Fill in each box with " $<$ ", or " $>$ ".

(a)  $-3 \square 7 \rightarrow$  is  $-3$  greater than  $7$ . No, so the answer will be less than ( $<$ ).

(b)  $5 \square -5 \rightarrow$  is  $5$  greater than  $-5$ . Yes, so the answer will be greater than ( $>$ ).

(c)  $-6 \square -2 \rightarrow$  is  $-6$  greater than  $-2$ . Yes, so the answer will be less than ( $<$ ).

Note In right handside on a number line One is the smallest number whereas in left handside on a number line one is the largest number.

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### Exercise 1

Fill in each box with "<" or ">"

(a)  $0 \square -2$

(b)  $-24 \square -25$

(c)  $8 \square -9$

(d)  $-12 \square -26$

(e)  $-15 \square -11$

(f)  $2 \square 0$

(g)  $3 \square -3$

(h)  $-3 \square -100$

(i)  $-1001 \square 100000$

(j)  $10 \square 9$

### Exercise 2

For each of the pairs of temperatures, write down the lower temperature.

(a)  $6^{\circ}\text{C}$  or  $4^{\circ}\text{C}$

(b)  $-5^{\circ}\text{C}$  or  $1^{\circ}\text{C}$

(c)  $0^{\circ}\text{C}$  or  $3^{\circ}\text{C}$

(d)  $-6^{\circ}\text{C}$  or  $-4^{\circ}\text{C}$

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4. Rewrite the following integers in ascending order.

(a)  $-7, 13, 7, -5, 4, -24, 22$

(b)  $-250, 500, -612, -435, 110$

(c)  $6, -5, 4, -4, 0, -2, 3$

5. Arrange the following integers in descending order.

(a)  $52, -8, 11, -16, -33, -19, 26$

(b)  $4, -7, -15, -1, 1, 5, -8$

(c)  $-235, -421, -158, 125, 239, -127$

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Manipulation of Addition and ~~Subtraction~~ Subtraction sign

$$\begin{aligned} + \oplus + &= + \\ + \oplus - &= - \\ - \oplus + &= - \end{aligned}$$

$$\begin{aligned} - \ominus - &= + \\ + \ominus - &= - \end{aligned}$$

Addition and subtraction

- ①  $+$   $+$   $=$   $+$
  - ②  $+$   $-$   $=$   $-$
  - ③  $-$   $+$   $=$   $-$
  - ④  $-$   $-$   $=$   $+$
- ② This <sup>is</sup> ~~can~~ ~~also~~ ~~apply~~ <sup>also applicable</sup> ~~the~~ when they are near to each other.
- ④ This works when the two  $(-)$  minus is near to each other.

Example 1

①  $16 + 30 = 46$

~~16 + 30 =~~

②  $116 - 30 = 86$

③  $-16 + 30 = 14$  → why the answer is positive? Because in front of 30 there is plus (+). Remember all the greater number dominate the field.

If in front of 30 there will be minus (-) the answer will be (minus) as 30 is greater than 16.



**Note: (Please copy all the Notes, Examples and Exercises on your copy book).**

④  $-16 - 30 = -46 \rightarrow$  ~~for this question you have to add~~  
~~the both~~ <sup>number first</sup> ~~question and then put a~~  
~~minus in front of the answer.~~

⑤  $16 + (-30) = -14$   
 $\downarrow$   
 ~~$16 + 30 =$~~   
 ~~$16 - 30$~~

⑥  $16 - (-30) = 46$   
 $\downarrow$   
 ~~$16 - 30$~~   
 ~~$16 + 30$~~

Exercise 1

(a)  $-16 + 30 =$

(b)  $-12 + (-17) =$

(c)  $53 + (-23) =$

(d)  $62 - (+85) =$

(e)  $-35 + (-17) =$

(f)  $110 - 55 + 15 =$

(g)  $-540 - (-220) - (+50) =$

(h)  $225 + (-450) - (-375) =$

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## Manipulation of Multiplication and Division sign

### Multiplication and Division

$$+ \times + = +$$

$$+ \times - = -$$

$$- \times + = -$$

$$- \times - = +$$

$$+ \div + = +$$

~~$$+ \div - = -$$~~

$$+ \div - = -$$

$$- \div + = -$$

$$- \div - = +$$

### Division involving Zero

#### Example 1

$$0 \div 5 = 0 \quad 0 \div -5 = 0$$

#### Example 2

#### Evaluate

(a)  $24 \div 6$  (b)  $24 \div -6$  (c)  $-24 \div 6$  (d)  $-24 \div -6$

#### Solution

(a)  $24 \div 6 = 4$

(b)  $24 \div -6 = -4$

(c)  $-24 \div 6 = -4$

(d)  $-24 \div -6 = 4$

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Exercise 1

Find the value of

(a)  $42 \div 7$

(b)  $(-28) \div 7$

(c)  $16 \div (-4)$

(d)  $(-8) \div (8)$

(e)  $54 \div (-9)$

(f)  $(-121) \div (-11)$



**Note:(Please copy all the Notes, Examples and Exercises on your copy book).**

$$(g) 0 \div (-45)$$

$$(h) (-48) \div (-4)$$

$$(i) 64 \div (-4)$$

$$(j) (-55) \div 5$$

$$(k) 625 \div (-5)$$

$$(l) (-72) \div 8$$