



## Worksheet 2 - MATH 1<sup>st</sup> Semester

NAME: \_\_\_\_\_

GRADE: 4 \_\_\_\_\_

DATE: \_\_\_\_\_

Topic: Unit 1.1 Counting and sequences

### Focus

- 1 Hassan shaded in grey these numbers on a hundred square. The numbers form a pattern.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- a What is Hassan's rule for finding the next number?

\_\_\_\_\_

\_\_\_\_\_

- b What is the next number in his pattern?

\_\_\_\_\_

- 2 The sequence 10, 16, 22, ... continues in the same way.  
Write the next **two** numbers in the sequence.

\_\_\_\_\_, \_\_\_\_\_

- 3 The rule for a sequence of numbers is 'add 3' each time.

1, 4, 7, 10, 13, ...

The sequence continues in the same way.

Circle the numbers that are **not** in the sequence.

22    28    33    40

- 4 A sequence has the first term 2020 and the term-to-term rule is 'add 11'.  
Write the first five terms of the sequence.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

- 5 Write the next four terms in these linear sequences.

a 10, 7, 4, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

b -9, -7, -5, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

c 1095, 1060, 1025, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

### Practice

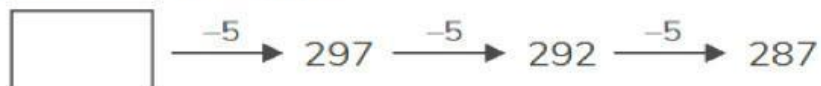
- 6 Here is part of a number sequence.  
The numbers increase by 25 each time.

25, 50, 75, 100, 125, ...

Circle all the numbers below that will be in the sequence.

355    750    835    900    995

- 8 Here is part of a number sequence.  
The first number is missing.



Write the missing number.

- 9 A sequence has first term 1001 and last term 1041.  
The term-to-term rule is 'add 5'.  
Write down **all** the terms in the sequence.

\_\_\_\_\_  
\_\_\_\_\_

**10** Each number in this sequence is double the previous number.  
Write the missing numbers.

\_\_\_\_\_, 3, 6, 12, 24, 48, \_\_\_\_\_

**12** The numbers in this sequence increase by 10 each time.

4, 14, 24, ...

The sequence continues in the same way.

Write two numbers from the sequence that make a total of 68.

\_\_\_\_\_ and \_\_\_\_\_

**13** Describe each of the sequences below.

- Is the sequence linear or non-linear?
- What is the first term?
- What is the term-to-term rule?
- What are the next two terms in the sequence?

**a** 5, 9, 13, 17, ...

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**b** 3, 11, 18, 24, ...

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**c** 3, 6, 12, 24, ...

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## Worksheet 3 - MATH 1<sup>st</sup> Semester

NAME: \_\_\_\_\_

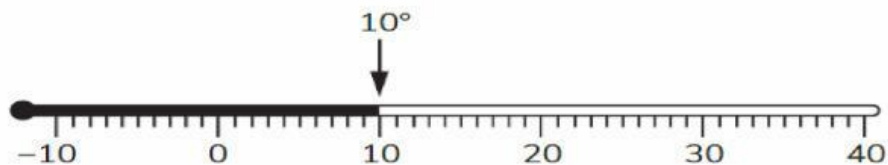
GRADE: 4 \_\_\_\_\_

DATE: \_\_\_\_\_

### Topic: More on negative numbers

#### Focus

- 1 Here is a thermometer. The arrow is pointing to  $10^{\circ}\text{C}$ .



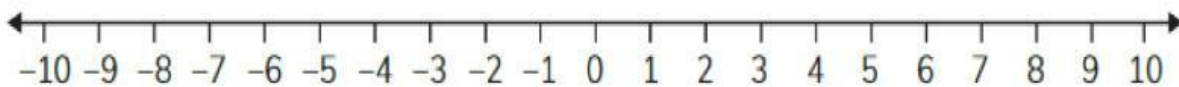
Draw an arrow on the thermometer pointing to  $-5^{\circ}\text{C}$ .

- 2 Here are some temperatures.

$4^{\circ}\text{C}$     $-3^{\circ}\text{C}$     $5^{\circ}\text{C}$     $0^{\circ}\text{C}$     $-2^{\circ}\text{C}$

- a Which is the warmest temperature? \_\_\_\_\_  
b Which is the coldest temperature? \_\_\_\_\_

- 3 Look at the number line.

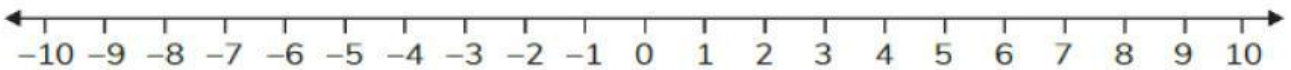


Write where you would land on the number line after these moves.

- |   |       |          |       |   |       |            |       |
|---|-------|----------|-------|---|-------|------------|-------|
|   | start | count on | end   |   | start | count back | end   |
| a | (-4)  | (1)      | _____ | b | (6)   | (6)        | _____ |
|   | start | count on | end   |   | start | count back | end   |
| c | (-5)  | (3)      | _____ | d | (0)   | (9)        | _____ |



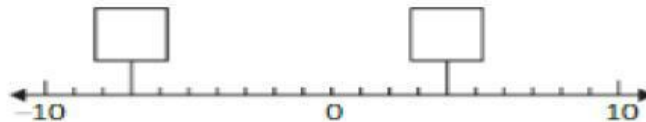
- 4 Circle the **larger** number in each pair.  
Find the difference between the two numbers.  
Use the number line to help you.



- a -6 -2 Difference: \_\_\_\_\_
- b -3 -1 Difference: \_\_\_\_\_
- c 4 -4 Difference: \_\_\_\_\_

**Practice**

- 5 Here is part of a number line.  
Write the missing numbers in the boxes.



- 6 The thermometer shows a temperature of  $-8^{\circ}\text{C}$ .



Draw arrows on the thermometer to point to these temperatures.

$-4^{\circ}\text{C}$      $14^{\circ}\text{C}$      $-1^{\circ}\text{C}$

- 7 Write the missing numbers in these sequences.
- a -12, -8, \_\_\_\_\_, 0, 4, 8, \_\_\_\_\_
- b -15, \_\_\_\_\_, -5, 0, 5, \_\_\_\_\_, \_\_\_\_\_
- 8 The temperature outside when Soraya arrived at school was  $-1^{\circ}\text{C}$ .  
By lunchtime the temperature had risen by  $8^{\circ}\text{C}$ .  
What was the temperature at lunch time?

\_\_\_\_\_

**Challenge**

- 9 Put these numbers in order on the number line.

-1    1    -2    -3    -5



10 The temperature in Amsterdam is  $2^{\circ}\text{C}$ .  
The temperature in Helsinki is  $-7^{\circ}\text{C}$ .  
How many degrees warmer is it in Amsterdam than in Helsinki?

\_\_\_\_\_

11 Here is a fridge freezer.



← The temperature in the freezer is  $-15^{\circ}\text{C}$

← The temperature in the fridge is  $4^{\circ}\text{C}$

What is the difference in temperature between the fridge and the freezer?

\_\_\_\_\_

12 Here is part of a number line.  
Write the missing numbers in the boxes.

