| Name:   |          | Labrador School Board<br>Grade 7 Mathematics<br>District Assessment<br>June 14 <sup>th</sup> , 2013 |
|---------|----------|---|
| Teacher | Name:    |   |
|         | Teacher: |   |

## Section 2: Calculator Section

You **are permitted** to use a calculator. You <u>are permitted</u> to use any math manipulatives that your teacher has used with you this year.

<u>Questions 16-25 (Selected Response):</u> These are worth 1 mark each. Even though you have to choose an answer, you may have to work things out on scrap paper. **Record your choices on the same sheet you used for your Section 1 responses.** 

<u>Questions 3-8 (Constructed Response)</u>: Answers are to be done in the spaces provided. Students are reminded to show <u>all</u> steps/calculations since credit may be given for incomplete or partially correct solutions. **Numerical answers without workings/explanation** <u>will not</u> merit full credit.

This is not a timed-test. You are allowed enough time to complete all items.

## Section 2 – Selected Response: Circle your responses on the answer sheet provided .

16. This table shows the plus/minus scores for Jarome Iginla in four of his seasons with the Calgary Flames.

| Season    | Plus/Minus Score |  |  |
|-----------|------------------|--|--|
| 2000-2001 | -2               |  |  |
| 2001-2002 | +27              |  |  |
| 2002-2003 | -10              |  |  |
| 2003-2004 | +21              |  |  |

What is the total of Jarome's plus/minus scores over these four seasons?

- A) –60
- B) –12
- C) +36
- D) +38
- 17. A 128 cm piece of ribbon is to be cut into 12.5 cm long strips. How many strips can be cut?
  - A) 10
  - B) 11
  - C) 140
  - D) 1600
- 18. 500 students were surveyed about their online gaming preference. How many students preferred 'Action' games?



- A) 225
- B) 275
- C) 360
- D) 455

19. What is the area of this parallelogram, in  $cm^2$ ?



- A) 3
- B) 24
- C) 54
- D) 108
- 20. What is the area of this circle, in cm<sup>2</sup>, rounded to one decimal place?



- A) 44.0
- B) 69.0
- C) 153.9
- D) 615.4
- 21. What is the mode of this data set?

(12,10,8,9,10,15,13)

- A) 7
- B) 10
- C) 11
- D) 15

22. What is the range of this data set?

(12,12,5,7,10,14,20)

- A) 8
- B) 11
- C) 12
- D) 15

23. Which pair of lines is parallel?



24. In which quadrant is (-3, -2)?



- A) Quadrant 1
- B) Quadrant 2
- C) Quadrant 3
- D) Quadrant 4

25. If  $\triangle ABC$  is reflected in the y axis, what will be the coordinates of C'?

- A) (-9,3)
- B) (-9,-3)
- C) (9,-3)
- D) (9,3)



Constructed Response: Answers are to be done in the spaces provided. Section 2 : Show all necessary workings.

Circles are used to create the pattern below: 3.



Diagram #1 Diagram #2

A) Complete this table. [1 mark]

B) Graph the relation on the grid below. [1 mark]

| Diagram #    | # of circles |  |
|--------------|--------------|--|
| ( <b>n</b> ) | ( <b>C</b> ) |  |
| 1            |              |  |
| 2            |              |  |
| 3            |              |  |
| 4            |              |  |
| 5            |              |  |
| 6            |              |  |
|              |              |  |



C) Write a relation to show how the number of circles, **C**, is related to the diagram number, **n**. [1 mark]

D) Determine the number of circles in the 10<sup>th</sup> diagram. [1 mark]

4. Mr. D is buying a new iPad to use in his classroom. The regular price is \$420 but it's on sale for 25% off. If the tax rate is 13%, how much will Mr. D pay for the iPad? [2 marks]

5. Some Gr. 7 students were surveyed to determine their favourite type of movie.

| Favourite Type of Movie | Number of | Fraction of     | Percent of   | Central Angle |
|-------------------------|-----------|-----------------|--------------|---------------|
|                         | Students  | Total           | Students (%) | (°)           |
| Action                  | 20        | $\frac{20}{50}$ |              |               |
| Comedy                  | 10        | $\frac{10}{50}$ |              |               |
| Horror                  | 12        | $\frac{12}{50}$ |              |               |
| Romance                 | 8         | $\frac{8}{50}$  |              |               |
| Total                   | 50        | 1               | 100          | 360           |

A) Complete the table below. [2 marks]

B) Use the data to construct and label a circle graph. [2 marks]

## Favourite Type of Movie



- 6. Solve using a method of your choice (show all your work):
  - A) 6x = 72 [1 mark]

B) 6x + 8 = 32 [2 marks]

7. *Juan's Cleaners* have developed a new disinfectant to kill germs. Ten tests were performed with the following results:

Percent of germs eliminated: 67%, 99%, 89%, 87%, 99%, 70%, 99%, 69%, 92%, 61%

A) Determine the mean and median of this data set. [1.5 marks]

B) If you were the <u>owner</u> of the company, which measure of central tendency (mean, median, or mode) would you use to try and convince people that your product is worth buying? Explain your answer. [1.5 Marks]

8. Plot A(2,-3), B(5,-3), C(2,-5) and D(5,-5) on the coordinate grid. Connect the points to form rectangle *ABCD*. Rotate *ABCD* 90° counter clockwise around the origin to form *A*'*B*'*C*'*D*'. What are the coordinates of *A*'*B*'*C*'*D*'?

[3 Marks]



## End of Section 2