# Labrador School Board <br> Grade 7 Mathematics <br> District Assessment <br> June 14 ${ }^{\text {th }}, 2013$ 

Name: $\qquad$
Teacher: $\qquad$

## Section 2: Calculator Section

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

Questions 16-25 (Selected Response): 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.

Questions 3-8 (Constructed Response): Answers are to be done in the spaces provided. Students are reminded to show all steps/calculations since credit may be given for incomplete or partially correct solutions. Numerical answers without workings/explanation will not 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) $\quad-60$
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 $\mathrm{cm}^{2}$ ?

A) 3
B) 24
C) 54
D) 108
20. What is the area of this circle, in $\mathrm{cm}^{2}$, rounded to one decimal place?


Use $\pi=3.14$
A) 44.0
B) $\quad 69.0$
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?
A)

B)

C)

D)

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

A) Quadrant 1
B) Quadrant 2
C) Quadrant 3
D) Quadrant 4
25. If $\triangle A B C$ is reflected in the $y$ axis, what will be the coordinates of $C^{\prime}$ ?
A) $(-9,3)$
B) $(-9,-3)$
C) $(9,-3)$
D) $(9,3)$


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

3. Circles are used to create the pattern below:


Diagram \#1 Diagram \#2


Diagram \#3
A) Complete this table. [1 mark]

| Diagram \# <br> (n) | \# of circles <br> (C) |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

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

C) Write a relation to show how the number of circles, $\mathbf{C}$, is related to the diagram number, $\mathbf{n}$.
D) Determine the number of circles in the $10^{\text {th }}$ 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?
5. Some Gr. 7 students were surveyed to determine their favourite type of movie.
A) Complete the table below. [2 marks]

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

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

6. Solve using a method of your choice (show all your work):
A) $6 x=72 \quad[1 \mathrm{mark}]$
B) $6 x+8=32 \quad[2$ 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 owner 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 $A B C D$. Rotate $A B C D 90^{\circ}$ counter clockwise around the origin to form $A^{\prime} B^{\prime} C^{\prime} D^{\prime}$. What are the coordinates of $A^{\prime} B^{\prime} C^{\prime} D^{\prime}$ ?
[3 Marks]


End of Section 2

