## Grade 7 Math - Unit 4 Test

Name: $\qquad$
Multiple Choice - Place the letter of the best response in the answer box.

1. What is the diameter, in cm , of the circle below?
(A) 4
(B) 8
(C) 16
(D) 50

2. What is the area, in $\mathrm{cm}^{2}$, of the following triangle?
(A) 28
(B) 38
(C) 56
(D) 77


| 1.) |  |
| :--- | :--- |
| 2.) |  |
| 3.$)$ |  |
| 4.$)$ |  |
| 5.$)$ |  |
| 6.$)$ |  |
| 7.$)$ |  |
| 8.$)$ |  |
| 9.$)$ |  |
| 10.$)$ |  |

3. A circle has a circumference of 66 cm . What is the best estimate for the diameter, in cm ?
(A) 11
(B) 22
(C) 33
(D) 44
4. What is the area, in $\mathrm{cm}^{2}$, of the circle below?
(A) 79
(B) 157
(C) 491
(D) 2125

5. What is the area, in $\mathrm{m}^{2}$, of the parallelogram?
(A) 14
(B) 28
(C) 36
(D) 49

6. In a survey, people were asked which type of TV Program was their favourite. Based on the graph, approximately, what percent of people preferred watching news?
(A) $25 \%$

TV Programs
(B) $40 \%$
(C) $50 \%$
(D) $65 \%$

7. For the graph in Question 7, if 400 people were surveyed, how many people preferred Sitcoms?
(A) 25
(B) 50
(C) 100
(D) 200
8. Based on the diagram below, if there are 300 dogs registered in total, how many are German Shepherds?
(A) 17
(B) 51
(C) 72
(D) 112

Breeds of Registered Dogs

Music Preference
Classical 10\%
9. What percentage of people prefer "Other"?
(A) $30 \%$
(B) $35 \%$
(C) $40 \%$
(D) $45 \%$

10. The table below show how many students preferred 4 different brands of soft drink. What percent of students preferred Root Beer?

| Soft Drink | Coke | Sprite | Root Beer | Pineapple Crush |
| :---: | :---: | :---: | :---: | :---: |
| \# of students | 15 | 20 | 10 | 5 |

(A) $10 \%$
(B) $20 \%$
(C) $30 \%$
(D) $40 \%$

Constructed Response - Answer all questions in the space provided. Include all units in final answers and show all workings where appropriate.
11. A. Jill is putting a rock border around a circular flower garden with a radius of 3.5 m . If the rock costs $\$ 11.99$ a metre, how much will she need to spend?
[2 marks]
B. If she wishes to put down a circular mat inside the garden, what is the area of the mat?
[2 marks]
12. The inside circle of a donut has a radius of 8 cm . What is the area of the top of the donut?
[3 marks]

13. The area of the parallelogram below (in white) is $48 \mathrm{~m}^{2}$. What is the area of the triangle?

14. The graph below shows how many sneakers were sold at a shoe store in January.

Sneakers Sold This Month

A. Which 2 types of sneakers made up over half of the sales?
[1 mark]
B. If there were 280 pairs of sneakers sold during the month, how many of them were Reebok?
[1 mark]
15. The Grade 7 students at CBI were surveyed to see what their favourite sport was. 35 liked Volleyball, 20 liked Basketball, 56 liked Dodgeball, and 14 liked Tiddlywinks.
A. Complete the table below
[4 marks]

| Sport | Frequency | Fraction | Decimal | Percent | Degrees |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Volleyball |  |  |  |  |  |
| Basketball |  |  |  |  |  |
| Dodgeball |  |  |  |  |  |
| Tiddlywinks |  |  |  |  |  |
| Total |  |  |  |  |  |

B. Construct a circle graph, including a title.
[4 marks]

Title: $\qquad$


