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| Section A  No Calculator Permitted | Section B  Calculator Permitted |
| 1. A B C D 2. A B C D 3. A B C D 4. A B C D 5. A B C D 6. A B C D 7. A B C D 8. A B C D 9. A B C D 10. A B C D 11. A B C D 12. A B C D | 1. A B C D 2. A B C D 3. A B C D 4. A B C D 5. A B C D 6. A B C D 7. A B C D 8. A B C D 9. A B C D 10. A B C D 11. A B C D 12. A B C D 13. A B C D 14. A B C D 15. A B C D 16. A B C D 17. A B C D 18. A B C D 19. A B C D 20. A B C D 21. A B C D 22. A B C D 23. A B C D 24. A B C D 25. A B C D 26. A B C D 27. A B C D 28. A B C D |

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| ESDLogo  **Grade 8**  **Common Mathematics Assessment**  **June 14, 2013**  **Section A**: **No Calculator Permitted** | |
| Name: |  |
| Mathematics Teacher: |  |
| Homeroom: |  |
|  |  |

**IMPORTANT**

You will need to complete your name and school information in three places:

1. Section A
2. Section B
3. Answer Sheet

**Section A**: **No Calculator Permitted**

12 Selected Response 12 points

5 Constructed Response 11 points

Total 23 points

**Section B**: **Calculator Permitted**

28 Selected Response 28 points

9 Constructed Response 29 points

Total 57 points

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**FINAL 80 Points**

**Selected Response: No Calculator Permitted.**

For items 1 – 12, circle the appropriate response on the answer sheet.

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| 1. | What is the square of 9? | |
| (A) | 3 |
| (B) | 4.5 |
| (C) | 18 |
| (D) | 81 |

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| 2. | Which number is represented on the number line below? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 3. | What is the best approximation of ? | |
| (A) | 4.5 |
| (B) | 5.5 |
| (C) | 10 |
| (D) | 40 |

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| 4. | Brad lost 4 points in each hand of cards he played. If he played 3 hands, which statement represents his final score at the end of the game? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 5. | Which product will have a negative value? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 6. | Complete the division statement: | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 7. | Which operation must be performed first? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 8. | Which multiplication sentence is modelled? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 9. | Which product is closest to 0? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 10. What is the product of ? | | |
|  | (A) |  |
|  | (B) |  |
|  | (C) |  |
|  | (D) |  |

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| --- | --- | --- |
| 11. | Calculate: | |
| (A) | 4 |
| (B) | 8 |
| (C) | 16 |
| (D) | 32 |

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| 12. Which expression is **not** equivalent to ? | | |
|  | (A) |  |
|  | (B) |  |
|  | (C) |  |
|  | (D) |  |

**Constructed Response: No Calculator Permitted.**

Answers to be written on this paper in the space provided. Show all workings.

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| 13. | Is 36 a perfect square? Support your answer using a strategy of your choice. | [2 points] |

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| 14. | Use a model, such as integer counters or a number line, to calculate: | [2 points] |

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| 15. | A student said the answer to this skill testing question was . His solution is as follows:  Explain where he made his mistake and give the correct solution. | [2 points] |

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| 16. There were 12 people at a party. Each person ate of a pizza.  How many pizzas were eaten? | [2 points] |

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| 17. Calculate: | [ 3 points] |

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|  | End of Section A.  Please raise your hand and your teacher will collect Section A.  You can now begin Section B. |  |

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| ESDLogo  **Grade 8**  **Common Mathematics Assessment**  **June 14, 2013**  **Section B**: **Calculator Permitted** | |
| Name: |  |
| Mathematics Teacher: |  |
| Homeroom: |  |
|  |  |

**Section A**: **No Calculator Permitted**

12 Multiple Choice 12 points

5 Constructed Response 11 points

Total 23 points

**Section B**: **Calculator Permitted**

28 Multiple Choice 28 points

9 Constructed Response 29 points

Total 57 points

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**FINAL 80 POINTS**

**Selected Response: Calculator Permitted.**

For items 18 – 45, circle the appropriate response on the answer sheet.

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| 18. | What is the side length of the square below? | |
| (A) | 13 cm |
| (B) | 42.25 cm |
| (C) | 52 cm |
| (D) | 84.5 cm |

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| 19. | Which set of numbers is a Pythagorean triple? | |
| (A) | 2 – 4 – 6 |
| (B) | 4 – 8 – 12 |
| (C) | 5 – 7 – 9 |
| (D) | 6 – 8 – 10 |

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| 20. | Which net will produce a rectangular prism? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 21. | What is the surface area of the prism represented by the net below? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 22. | What is the surface area of the prism shown? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 23. | The surface area of a cube is . What is the area of one face? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 24. | Calculate the height of the triangular prism if its volume is and base area is . | |
| (A) | 9 *cm* |
| (B) | 144 *cm* |
| (C) | 180 *cm* |
| (D) | 2916 *cm* |

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| 25. | What is the volume of the cylinder to the nearest ? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 26. | What percent of the following grid is shaded? | |
| (A) | 36.25% |
| (B) | 36.75% |
| (C) | 63.25% |
| (D) | 63.75% |

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| 27. | What is 225% as a decimal? | |
| (A) | 0.00225 |
| (B) | 0.225 |
| (C) | 2.25 |
| (D) | 22500 |

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| 28. | Which fraction is equal to 0.17% ? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 29. | Over a ten year period the price of gas increased from $0.60 to $1.20. What is the percent increase? | |
| (A) | 50% |
| (B) | 60% |
| (C) | 100% |
| (D) | 200% |

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| 30. | The regular price of a t-shirt is $20.00. It is discounted by 30%. What is the sale price? | |
| (A) | $17.00 |
| (B) | $14.00 |
| (C) | $6.00 |
| (D) | $3.00 |

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| 31. | What is the ratio of to to total shapes below? | |
| (A) | 3:4:6 |
| (B) | 3:13:4 |
| (C) | 6:4:13 |
| (D) | 6:4:3 |

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| 32. | In a class, there are 7 girls for every 5 boys. If there are 24 students in the class, how many are boys? | |
| (A) | 5 |
| (B) | 10 |
| (C) | 12 |
| (D) | 14 |

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| 33. | Solve: | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 34. What is the value of if ? | | |
|  | (A) |  |
|  | (B) |  |
|  | (C) |  |
|  | (D) |  |

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| 35. | Expand: | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 36. | What is the missing value in the table?   |  |  | | --- | --- | | **x** | **y** | |  |  | |  |  | | 0 |  | | 1 |  | | 2 | 5 | | |
| (A) | 1 |
| (B) | 2 |
| (C) | 3 |
| (D) | 4 |

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| 37. | Marc receives $10.00 per week as allowance and an extra $2.00 per chore (*c*). Which represents the total amount of money (*t*) that Marc receives each week? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 38. | Describe the relation between the total cost of a pizza (C) and the number of toppings (t). | |
| (A) | As the number of toppings increases by 1, the total cost decreases by 2. |
| (B) | As the number of toppings increases by 1, the total cost decreases by 1. |
| (C) | As the number of toppings increases by 1, the total cost increases by 2. |
| (D) | As the number of toppings increases by 1, the total cost increases by 1. |

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| 39. | What is the probability of getting heads when you flip a $1 coin and landing on M with the spinner below? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 40. | On Pi Day students have a choice of one food item and one drink from the list below. What is the probability, to the nearest percent, that a student will order a bagel and milk?   |  |  | | --- | --- | | FOOD | DRINK | | Pizza | Milk | | Bagel | Juice | | Hamburger | Water | | Cheeseburger |  | | |
| (A) | 8% |
| (B) | 12% |
| (C) | 25% |
| (D) | 33% |

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| 41. | What type of graph shows change over time? | |
| (A) | Bar graph |
| (B) | Circle graph |
| (C) | Line graph |
| (D) | Pictograph |

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| 42. | Which view is represented by the people in this sign?  http://www.transportation.alberta.ca/images/31d.jpg | |
| (A) | Front |
| (B) | Back |
| (C) | Side |
| (D) | Top |

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| 43. | What is the front view after this object is rotated 90° clockwise about the axis shown? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

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| 44. | In the tessellation below which shape is a reflection of the shaded shape? | |
| (A) | A |
| (B) | B |
| (C) | C |
| (D) | D |

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| 45. | Which shape will tessellate? | |
| (A) |  |
| (B) |  |
| (C) |  |
| (D) |  |

**Constructed Response: Calculator Permitted.**

Answers to be written on this paper in the space provided. Show all workings.

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| 46. | The size of a TV screen is described by the length of its diagonal. If the 50-inch flat screen TV shown below has a width of 30 inches, what is the length? | [3 points] |

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| 47. | The rectangular community swimming pool is 10*m* by 7*m* by 3*m* and it must be filled so that the surface of the water is 0.2 *m* lower than the ledge of the pool. If one truck load of water holds of water, how many truck loads will need to be delivered to fill the pool? | [4 points] |

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| 48. | Andrea’s cake has a diameter of 24 *cm* and a height of 10*cm*. Calculate how many of chocolate icing, to the nearest tenth, she needs to cover the sides and top of the cake. | [3 points] |

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| 49. | Peter has $380 in the bank. He wants to purchase an iPad mini that costs $349.99 before taxes. Does he have enough money? **Note**: HST is 13%  If so, how much will he have left over? If not, how much extra money does he need? | [3 points] |

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| 50. | Which is the better buy?  3 cans of soda for $2.37 at Store A  or  4 cans of soda for $3.08 at Store B. | [3 points] |

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| 51. | Grade 8 students are ordering class t-shirts. The company charges a base rate of $20 plus $6 per t-shirt. An equation for this relation is where *C* is the total cost in dollars and is the number of t-shirts. | | [4 points] |
| a) Complete the table of  values. | b) Graph the relation. Label the axes. |

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| 52. | 1. Solve algebraically: 2. Verify the solution. | [3 points] |

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| 53. | Explain how the data displayed in the graph is misleading. | [2 points] |

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| 54. | Draw and label the **top, front, left** and **right** views of the given object. | | [4 points] |
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|  | End of Grade 8 Common Mathematics Assessment.  Have a safe and happy summer! |  |