**Math 8**

**Final Exam Practice Test**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Learning Goals:**

1. I can find perfect squares and square roots using grids and numbers
2. I can estimate the square root of numbers that are not perfect squares
3. I can demonstrate an understanding of percents greater than 0%
4. I can demonstrate an understanding of ratios and rates
5. I can multiply and divide positive fractions and mixed numbers
6. I can multiply and divide positive and negative integers pictorially (tiles or number line) and symbolically
7. ~~I can graph and analyse two variable linear relations~~
8. I can solve for X both pictorially using algebra tiles (or balances) as well as numerically
9. I can use the Pythagorean Theorem to solve right triangle problems
10. I can draw and construct nets for 3D objects
11. I can determine surface area for right rectangular prisms, right triangular prisms, and right cylinders
12. ~~I can determine volume for right prisms and right cylinders~~
13. I can draw the top, front, and side views of 3D objects of right prisms
14. ~~I can explain the properties of tessellations~~
15. I can critique ways in which data is graphically and statistically presented
16. I can solve probability of independent events

**Self Assessment of Math Skills:**

Using the list of learning goals from the front page, I think that this year I have been MOST SUCCESSFUL in the below areas:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Using the list of learning goals from the front page, I think that this year I STILL STRUGGLE in the below areas:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I am going to or already have started preparing for this test by: (please check)

* doing the textbook practice questions
* reviewing worksheets and notes from throughout the year
* reviewing prior tests
* making cue cards of questions and examples
* studying with a friend
* attending lunch time tutorials
* other : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I plan to spend \_\_\_\_\_\_\_\_\_\_hours preparing for this final exam

Parent signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 1: I can find perfect squares and square roots using grids and numbers**

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| Solve for 92 | Solve for 62: |

**Part 2: I can estimate the square root of numbers that are not perfect squares**

|  |  |
| --- | --- |
| Estimate for | Estimate for |

**Part 3: I can demonstrate an understanding of percents greater than 0%**

|  |  |
| --- | --- |
| Write 22% as a fraction in lowest terms | What is 40% of 120? |

**Part 4: I can demonstrate an understanding of ratios and rates**

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| --- | --- |
| Reduce the following ratio 4 dogs for every 6 cats: | IGA is selling 4 oranges for $3. What is the **unit price** per orange? |

**Part 5: I can multiply and divide positive fractions and mixed numbers**

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**Part 6: I can multiply and divide positive and negative integers using both tiles and numbers**

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| Show using tiles: (-2)(-12) = | Solve: 3(2 – 7) + 4(18 – 10) |

**Part 8: I can solve for X both pictorially using algebra tiles (or balances) as well as numerically**

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| Using algebra tiles or balances, show how you would solve for X: 2x -1 = 19 | Solve: |
| Using algebra tiles or balances, show how you would solve for X: 4x - 3 = 4 | Solve: |

**Part 9: I can use the Pythagorean Theorem to solve right triangle problems**

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| --- | --- |
| Solve for the unknown side:  11 cm  9 cm  X | Is this a right triangle? Why or why not?  5 cm  2 cm  4 cm |

**Part 10: I can draw and construct nets for 3D objects**

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| --- | --- |
| Draw a net diagram for a cylinder | Draw a net for a right rectangular prism. |

**Part 11: I can determine surface area for right rectangular prisms, right triangular prisms, and right cylinders**

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| --- | --- |
| What is the ***surface area*** of the below shape?  [https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTupkVuMaoVAUM2NMOidSSVBx93NpRFEJF-s7HmtHbLZD3iV599](http://www.google.ca/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=6coN31xgyw5yeM&tbnid=77gcGnqZ15NfqM:&ved=0CAUQjRw&url=http://www.onlinemathlearning.com/volume-rectangular-prism.html&ei=8_6eUYK5NYfiiALV-oGoAg&bvm=bv.47008514,d.cGE&psig=AFQjCNEqUMqCdJ8vb9guQ5BZChytk7RW1A&ust=136946083954) | What is the ***surface area*** of the below shape?  8 cm  3 cm |

**Part 13: I can draw the top, front, and side views of 3D objects of right prisms**

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| --- | --- |
| Sketch the side view of a cylinder: | Sketch the top view of a right triangular prism: |

**Part 15: I can critique ways in which data is graphically and statistically presented**

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| --- |
| You have collected data on the length of your forearm (cm) and the height of your foot (cm).  What is the best way to show this in graph format? Why?   1. pie chart 2. line graph 3. bar graph 4. data table   Because: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

**Part 16: I can solve probability of independent events**

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| You have a bag of 10 bingo chips. 4 are pink and 6 are blue. If you remove four bingo chips in a row, what is the probability that they are all pink? |