Christ the Teacher Grade 9 Screener I1 Name\_\_\_\_\_\_Key\_\_\_\_\_\_\_\_\_\_\_\_A picture containing text, clipart, vector graphics

Description automatically generated

A group of colorful dice

Description automatically generated with low confidence

How do you feel about Math? Circle one



|  |  |  |
| --- | --- | --- |
| 1) Write the value of the underlined digit:  4.268451  **Four thousandths or**  **4 thousandths**  **Or 4/1000 Note: If the student writes “thousands” it is wrong** | 32 Circle all the numbers divisible by 3  135 65 355 54 9 | |
| N 7.2 Place value/decimal | N 7.1 Divisibility rules | |
| 3) All these numbers are divisible by what number? **5**  15 45 90 10 125 | 4) What is the greatest common factor of 48, 16 and 40? **8** | |
| N 7.1 Divisibility rules | N6.2 *Factors and Multiples* | |
| 5) Use any method you like to write all the prime factors of 36  **2X2X3X3 or 22X33**  **Note the factors do not need to be in any order** | 6) What is the least common multiple of 3,4, and 6? **12** | |
| N6.2 *Factors and Multiples* | N6.2 *Factors and Multiples* | |
| 7) Circle all the prime numbers  10 15 17 5 21 29 11 | 8)  =**11** | |
| N6.2 *Factors and Multiples* | N8.1 *Square root* | |
| 9)  = **64** | | 10) Calculate |
| *N 8.1 Square a number* | | N 6.3 *Order of Operations* |
| 11) Show approximately where would go on the number line  **As long as it is between 8 and 9 mark it right** | | |
| N8.1 *Approximate* *Square root* | | |
| 12) Write in lowest terms (reduce/simplify) | 13) Express as an improper fraction | |
| N7.5 *Fractions* | N 6.7 N7.5 *Fractions* | |
| 14) Express as a mixed number | 15) Express as a mixed number | |
| N 6.7 N7.5 *Fractions* | N7.5 *Fractions* | |
| 16) Calculate  4.5 + 0.73 + 256.458= | 17) Calculate | |
| N 7.2 Add Decimals | N 7.2 *Order of Operations, decimals* | |
| 18)  6.5 – 3.682= | 19) Place the decimal where it belongs in this product | |
| N 7.2 Subtract Decimals | N 6.4*Mult and Div of decimals* | |
| 20) Place the decimal where it belongs in this quotient. | | |
| N 6.4*Mult and Div of decimals* | | |
| 21) Find the product  0.891  ×16 14.256 | 22) Divide (do not leave a remainder)  24.125 ÷ 5 =4.825 | |
| N 6.4, N 7.2 *Mult and Div of decimals* | N 6.4, N7.2 *Mult and Div of decimals* | |
| 23) What **percent** of this shape is shaded? =  A picture containing clipart  Description automatically generated**80%** | 24) What **percent** is shown here?    **115%** | |
| N 6.5, N7.4 *Percent and Fraction* | N 8.2 *Percent greater than 100* | |
| 25) Express 35% as a fraction  or Even if it’s not reduced, mark it correct | 26) Write as a decimal.  **0.03** | |
| N 6.5, N7.4 *Percent and fraction* | N 7.4 Fraction and Decimal | |
| 27) Write 0.72 as a percent  0.72 = \_\_\_**72**\_\_\_% | 28) Write 4% as a decimal  4% = \_\_\_\_\_**0.04\_** | |
| N 7.4 *Decimal and Percent* | N 7.4 *Decimal and Percent* | |
| 29) Write 0.145 as a percent  0.145 = \_\_\_**14.5**\_\_\_% | 30) Find 10% of 280 = **28**  Make a note if students had to calculate this. They should mentally be able to take 10% and 1%. Mark it right but reinforce reasoning. | |
| N 8.2 *Percent less than 1* | N 8.2 *Decimal and Percent* | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 31) Find 120% of 30  100% +10% + 10%  **30+3+3=36**    Or: | | 32) Calculate  **32.3584** Students should know to move the decimal | | |
| N 8.2 *Decimal and percent* | | N 8.2 *Decimal and percent* | | |
| 33)Write as a percent.  **75%** | 34) Order the following from least to greatest | | | |
| N 8.2 *Decimal and Percent* | N 7.3 Fraction and Decimal | | | |
| 35) Place the following approximately where they belong on the number line  0.25 1.2  1  0 | | | | |
| N 7.3 Fraction and Decimal | | | | |
| 36) Add | | | | 37) Subtract |
| N7.5 *Fraction* | | | | N7.5 *Fraction* |
| 38) | | | 39)  Suggestion: If not reduced, mark it right but return the assessment later and remind that all fractions should be reduced. If not cross reducing before multiplying, teach that after the assessment. Also you can prompt that all fractions should be reduced (simplest terms) | |
| N 8.4 *Multiply Fraction* | | | N 8.4 D*ivide Fraction* | |
| 40) | | | 41) | |
| N 8.4 *Multiply Fraction* | | | N 8.4 D*ivide Fraction* | |
| 42) Calculate using order of operations | | | | |
| N 8.4 *Order of Operations with Fractions* | | | | |
| 43) | | | | 44) |
| N 7.6 *Add Integers* | | | | N 7.6 *Subtract Integers* |
| 45) | | | | 46)  **48** or +48 |
| N 8.5 *Divide Integers* | | | | N 8.5 *Multiply Integers* |
| 47) | | | | Shirt outlinePants with solid fillSwimsuit outlineSwimsuit outlineShirt outline48) Write a ratio to express the number of shirts to all clothing items.  **Swimsuit outlinePants with solid fill4:11**  **orSwimsuit outlineShirt outline**  **Shirt outlineSwimsuit outline** |
| N 7.6 Integers | | | | N8.3 *Ratios* |
| 49) To make hot chocolate, you need 5 scoops of powdered mix for every 2 cups of hot water. How many scoops of powder should you use in a thermos that holds 8 cups? or x = 20 scoops | | | | 50) Solve for *t*: |
| N 8.3 *Proportional Reasoning, rates* | | | | P 7.3 *Two Step Equation* |
| 51) Solve for *x*: | | | | 52) Solve for *x*: |
| P 7.3 P 8.2  *Equation* | | | | P 7.3 P 8.2 *Two Step Equation* |
| 53) | | | | 54) Evaluate the expression  when  **11** |
| P 8.2 *Solve equation with brackets* | | | | P 7.2 *Evaluate Expression* |
| 55) Write the rule with words or an equation   |  |  | | --- | --- | | x | y | | 1 | 3 | | 2 | 7 | | 3 | 11 | | 4 | 15 | | 5 | 19 |   Multiply by 4 and subtract 1  Or | | | | |
| P6.1, P7.1 *Tables and Graphs* | | | | |
| |  |  | | --- | --- | | Input | Output | | 1 | 1 | | 2 | 3 | | 4 | 7 | | 5 | 9 | | 6 | 11 |   56) Create an input/output table from this graph    Chart  Description automatically generated Students may not include the pair  (6,11) as the point is off the graph | | | | |
| P6.1, P7.1 *Tables and Graphs* | | | | |
| Chart, line chart  Description automatically generated57) Graph the line using the table of values   |  |  | | --- | --- | | x | y | | 0 | 1 | | 3 | 4 | | 4 | 5 | | 7 | 8 | | | | | |
| P6.1, P7.1 *Tables and Graphs.* SS7.4 *points and the Cartesian plane* | | | | |
| Chart, line chart  Description automatically generated58) Fill in the table and draw the graph of the line.   |  |  | | --- | --- | | x | y | | 0 |  | | 1 |  | | 2 |  | | 3 |  |   Students may not plot (3,11) as its off the graph | | | | |
| P 8.1 *Create graph from equation* | | | | |
| 59) Circle the point that lies on the line  or | | | | |
| |  | | --- | | P 8.1 *Points on line* | | | | | |
| 60) Find the volume.  **V=105 cm3**  If the student does not put units or uses incorrect units, but has the calculation correct, mark it right but have a conversation about including units, especially explaining why volume is cm3 | | | | |
| SS 6.2 *Volume* | | | | |
| 61) The diameter of this circle is 12cm. What is the measure of it’s radius?  *r*  D=12cm  *r*=\_**6cm**\_\_\_\_  If the student does not write units or uses incorrect units, but has the calculation correct, mark these right but have a conversation about including units | | | | 62) Find the area of this triangle  or  **A = 24 m2**  6 m  8 m |
| SS7.1 *Diameter and radius* | | | | SS7.2 *Area of triangle* |
| 63) Solve for *x*  **X=10cm** | | | | |
| SS8.1 *Pythagorean Theorem* | | | | |
| 64) Calculate the surface area of this prism  Volume And Surface Area Of A Prism (Video) | annadesignstuff.com | | | | |
| SS8.2 *Surface Area* | | | | |
| 65) There are six marbles in this bag. If you reach into the bag and pull out one marble, what is the probability you pull out a white one? | | | | |
| SP 7.3 *Probability* | | | | |
| 66) Explain what this data shows about moose and wolf populations in Saskatchewan. Any valid observation: Ex, as the wolf population decreases, the moose population increases  Wolf & Moose Populations - Isle Royale National Park (U.S. National Park  Service)  Moose  Wolves | | | | |
| SP 8.1 *Interpreting data* | | | | |