**Math Skills Final Exam 1/18/19**

1. Four Question Patterns Quiz (25 minutes: 20 Points)
2. Eight Question Decimals Quiz (25 minutes: 20 Points)
3. Complete “POW 2: Checkerboard Squares” from IMP Book 1 in groups. Then Individually, write up your problem statement, process and solution on the attached form. (Or type it.) (35 Minutes: 30 Points)
4. Log into MathSpace at <https://mathspace.co/student/>and complete: (35 Minutes: 30 Points)
   1. Patterns Math Skills Midterm Exam
   2. Decimals Math Skills Midterm Exam
5. Complete Quick Math 20 & 21. (Note: Problems marked “Bonus” will not count against if your answer is not correct.) (15 minutes: 10 Points)

**In/Out Patterns Name**

**Part I: One-Step Problems**

1. a. What are the next three terms in this series: 9, 18, 27…

b. Describe the pattern in words.

c. Describe the pattern in a math sentence.

d. What is the 100th term in the series?

1. Fifteen people walk into the empty cafeteria. The break into three equal groups to work on their science projects. The project is due in three days. How many people are in each group?
2. Fill in the missing boxes and write the formula.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| in | 6 | 7 | 8 | 9 | 12 |
| out | 18 | 21 | ? | 27 | ? |

**Part II: Two-Step Problems**

1. a. For the formula 3x – 2 = y, what is the value of y when x equals 2?

b. When x equals 5?

c. When x equals 100?

1. Twenty-two people walk into the empty cafeteria. Two of the people are called to the office. The others break into five equal groups to work on their science projects. The project is due in three days. How many people are in each group?
2. Fill in the missing boxes and write the formula.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| in | 4 | 5 | 6 | 7 | 10 |
| out | 11 | 14 | 17 | 20 | ? |

**Decimal Applications**

1. If gasoline sells for $1.35 per gallon, what is the cost of 9 gallons of gasoline? :
2. Mr. Powers weighed 170.5 pounds. If he lost 3.5 pounds, how much does he weigh?
3. Ryan was charged $2.50 for writing checks last month. If it costs $0.04 to write one check, what does it cost to write 150 checks?
4. Ms. Patterson’s best time in the 110 meters was 10.5 seconds until she ran it .6 seconds faster. What is her new personal best?
5. Bella’s beginning balance was $120.50. He made deposits of $40.67, $23.50, and $15. What is her new balance?
6. Caroline was charged $12.25 for going over her text limit last month. If each extra text she sent cost her $0.25, how many extra texts did she send?
7. Mr. Cowit has $18 to buy gasoline. If the cost for each gallon is $1.20, how many gallons can he put in his car?
8. Caroline buys CDs for $7.50 each and sells them for $10.95 each. How much profit does she make on 20 CDs? :

**Name:**

**POW**

**Remember to use the back or a second sheet if you need additional room.**

**Problem Statement:**

**Process:**

**Solution:**

**Extensions:**