Lesson Plan

Grade 9 Academic Math   **Day:**   5

Unit/Chapter: **Grade 8 Review**   **Topic:**   **Grade 8 Review Test**

'   Diagnostic Test - allow full period for completion

'   **Assignment:** when finished,

   <   read p. 34 from *Nelson 9*
   <   write a detailed note, complete with examples, on calculating Mean, Median, and
            Mode
   <   do p. 41 # 1 - 3

MPM 1D - Diagnostic Test

Name : _____

Mark (/92) : _____

Directions: Read each section carefully. Do all work in the spaces provided. **Show your work where necessary!!! NO CALCULATORS ALLOWED!!**

1. Round to the accuracy indicated. (2 marks)

a) 25 674 (hundreds) _____   b) 10.3056 (thousandths) _____

2. Perform the indicated operation. (8 marks)

a) 7.08 + 11.012 + 10.92 + 204.10 =   b) 9009.2 - 812.9 =

c) 2.14 x 1.03 =   d) 156 ÷ 1.2 =

3. Perform the indicated operation. Answers must be in lowest terms. (8 marks)

a) $\dfrac{2}{5} + \dfrac{1}{3} =$

b) $2\dfrac{1}{2} - \dfrac{3}{4} =$

c) $\dfrac{3}{4} \times \dfrac{8}{9} =$

d) $1\dfrac{2}{3} \div 25 =$

4. Write the following as a percent. (4 marks)

a) $0.02 =$

b) $1.22 =$

c) $\dfrac{2}{3} =$

d) $\dfrac{10}{2} =$

5. Write the following as a decimal. (4 marks)

a) $20\% =$

b) $108\% =$

c) $\dfrac{3}{5} =$

d) $\dfrac{5}{2} =$

6. Write the following as a fraction in lowest terms. (4 marks)

a) 4% =   b) 500% =

c) 0.8 =   d) 0.375 =

7. Write the value of each of the following. (4 marks)

a) 2^3 =   b) $(-2)^3$ =

c) -1^3 =   d) $\left(\dfrac{1}{2}\right)^3$ =

8. Simplify. (4 marks)

a) $2(-1)^2$ =   b) $3^2 \times 2^2$ =

c) $-2^3 \times (-1)^3$ =   d) $(3^3)(-1^5)(2^2)$ =

9. Evaluate. (8 marks)

a) $3^2 + 2^3$ =   b) $4^2 - 2^4$ =

c) $5^3 - 4^3$ =   d) $6^2 + 8^2$ =

10. Evaluate. (10 marks)

a) -3 + (-2) =   b) 7 - 8 =

c) -6 - (-1) =   d) -10 - 3 =

e) -12(3) =   f) (-2) x 9 =

g) 3 x (-2) =   h) -27 ÷ 3 =

i) 18 ÷ (-9) =   j) -36 ÷ 0 =

11. Evaluate. (2 marks)

a) $\sqrt{64} =$ b) $\sqrt{121} =$

12. Find the area and perimeter of each of the following. Don't forget units!!! (6 marks)

a)   b)
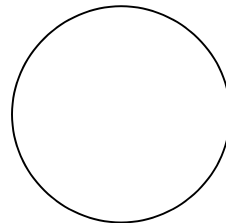
13. Evaluate the following using order of operations. (8 marks)

a) $24 \div (6-3) + 10 =$

b) $(15-13)^2 + 12 \div (-6) =$

c) $3^2 - (50-5) \div 9 =$

d) $[(36 \div 6) \times 2]^2 - (9-11) =$

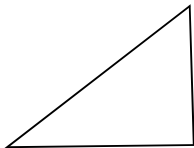**14.** Find the value of each expression given a = -1 and b = 3. (8 marks)

a) 3a - 2b =
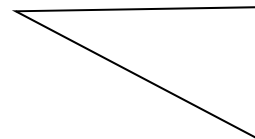
b) -6a $\div$ (-3)b =

c) -2a + (-4)b =

d) -b - a =

15. Find the value of the unknown. (6 marks)

a)

b)

16. Calculate the mean, median, and mode for the following set of data. Show all work in the

space below. Place your final answers in the spaces provided. (6 marks)

5, 9, 2, 4, 1, 2, 6, 7, 1, 2

mean: _____   mode: _____

median: _____