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**SAMPLE SECTION: I [GOAL: 10-15 Min., All Correct] Score: \_\_\_\_\_/24****Integers - Calculate and round to 2 decimal places. You may use a calculator if it is allowed in your school.**

1.  $-24 + (-63) / (8)$

2.  $6 / (37) \cdot (-16)$

3.  $-44 / (17) + (-20)$

4.  $-5 / (14) \cdot (-10)$

5.  $45 + (-37) / (-15)$

6.  $7 / (72) \cdot (17)$

7.  $-37 / (-32) \cdot (-12)$

8.  $48 + (88) / (-12)$

9.  $41 / (-86) \cdot (-18)$

10.  $-29 / (56) + (-12)$

11.  $-13 / (-25) \cdot (6)$

12.  $-39 / (41) + (9)$

**Exponents - Solve the following problems.**

13.  $7^4 + 3^2$

14.  $3^4 + 3^4$

15.  $9^2 + 5^3$

16.  $9^4 + 5^2$

17.  $2^4 + 2^3$

18.  $3^4 - 5^3$

19.  $3^4 - 4^3$

20.  $10^4 - 3^2$

21.  $7^4 - 3^2$

22.  $5^3 + 3^4$

23.  $6^4 - 5^2$

24.  $7^4 + 3^2$

**SAMPLE**

Score: \_\_\_\_\_/15

**1-8. Mental Math - Fill in the missing numbers.**

1.  $(125 + \underline{\quad}) \div 25 = 6$

2.  $(\underline{\quad} + 50) \div 10 = 35$

3.  $(400 - \underline{\quad}) \div 20 = 15$

4.  $250 = 5 \times (49 + \underline{\quad})$

5.  $(\underline{\quad} - 20) \div 12 = 20$

6.  $150 = 15 \times (15 - \underline{\quad})$

7.  $(\underline{\quad} + 16) \times 16 = 400$

8.  $(200 - \underline{\quad}) \div 15 = 12$

**9-12. Place the parentheses, if required, in the appropriate location.**

9.  $45 - 18 \div 3 = 9$

10.  $71 \times 3 + 10 = 223$

11.  $133 - 20 \times 6 = 13$

12.  $82 + 22 \div 13 = 8$

**Word Problems**

**13-15. Mrs. Smith wants to purchase a new refrigerator. She shopped around and found two possible refrigerators.**

**Refrigerator A:** Purchase price of \$897  
 Operation cost of \$17.50/month

**Refrigerator B:** Purchase price of \$752  
 Operation cost of \$22.50/month

13. Express the purchase price of the more expensive refrigerator as a percent of the cheaper one.

- a) 20%                      b) 150%                      c) 105%                      d) 120%

14. What is the difference between the operating cost over the lifespan of refrigerators A and B? Assume the lifespan to be 10 years.

15. Overall, which refrigerator would be the best deal if the total cost for a 10 year period is taken into account?