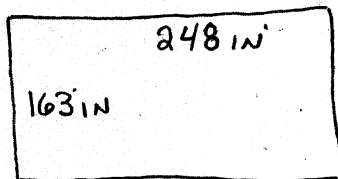


**Math 085 - Test 1a**  
February 6, 2013

Name key Score \_\_\_\_\_

**Part I** - Solve each problem. Show all work to receive full credit. Supply explanations where necessary. Each problem is worth 2 points. **CALCULATORS ARE ALLOWED ON THIS PORTION OF THE TEST.**

1. A rectangle measures 163 inches by 248 inches. Find the area of the rectangle.



$$163 \times 248 = \underline{\underline{40,424 \text{ in}^2}}$$

2. Compute  $7^5$ .

$$7 \times 7 \times 7 \times 7 \times 7 = \underline{\underline{16,807}}$$

3. Sally split up 9392 Hershey's Kisses into groups of size 16. When she was finished, how many groups did she have?

$$9392 \div 16 = \underline{\underline{587}} \text{ groups}$$

4. Solve the equation:  $x + 1984 = 5432$

$$x = 5432 - 1984 = \underline{\underline{3448}}$$

5. Evaluate the following expression:  $[92 \times (10 - 4) \div 8] + [7^2 \times (8 - 6)] = \underline{\underline{167}}$

**Math 085 - Test 1b**

February 6, 2013

Name key

Score \_\_\_\_\_

**Part II** - Solve each problem. Show all work to receive full credit. Supply explanations where necessary. Each problem is worth 2 points. **CALCULATORS ARE NOT ALLOWED ON THIS PORTION OF THE TEST.**

1. Stan evaluated  $5 + 3 \cdot 4$  as follows:

$$5 + 3 \cdot 4 = 8 \cdot 4 = 32$$

What did Stan do wrong? What answer should Stan get?

STAN DID THE ADDITION FIRST  
WHEN HE SHOULD HAVE  
MULTIPLIED FIRST

SHOULD BE

$$5 + 3 \cdot 4 = 5 + 12 = 17$$

2. Find the quotient and remainder when 7935 is divided by 8.

$$\begin{array}{r} 991 \text{ r } 7 \\ 8 \overline{) 7935} \\ \underline{72} \phantom{0} \\ 73 \phantom{0} \\ \underline{72} \phantom{0} \\ 15 \phantom{0} \\ \underline{16} \\ 5 \end{array}$$

$$991 \text{ r } 7$$

3. A large auditorium contains 57 rows of chairs, and each row contains 84 chairs. How many chairs are there in all?

$$57 \times 84 = \begin{array}{r} 57 \\ \times 84 \\ \hline 228 \\ 4560 \\ \hline 4788 \end{array}$$

4. Estimate by rounding to the nearest ten:  $718 \div 94$

$$720 \div 90 = 72 \div 9 = 8 \rightarrow 718 \div 94 \approx 8$$

5. Explain why  $x = 1$  is NOT a solution of the equation  $5x + 3 = 10$ .

REPLACE THE X WITH A 1 AND COMPUTE...

$$5(1) + 3 = 5 + 3 = 8.$$

1 THE RESULT IS NOT 10

$$5(1) + 3 = 8 \neq 10$$

6. Put these integers in order from least to greatest.

$$-5, 6, 0, -7, 5, 37, -25, -1$$

$$-25, -7, -5, -1, 0, 5, 6, 37$$

7. Round 53652 to the nearest

(a) ten  $53650$

(b) hundred  $53700$

(c) thousand  $54000$

(d) ten thousand  $50000$

8. Evaluate:  $16 \div (8 - 2^2)^2$

$$16 \div (8 - 4)^2 = 16 \div 4^2 = 16 \div 16 = \underline{\underline{1}}$$

9. Solve each equation.

(a)  $y - 5 = 10$   
 $+5 \quad +5 \quad \Rightarrow \quad \underline{\underline{y = 15}}$

(b)  $\frac{6x}{6} = \frac{48}{6} \Rightarrow \underline{\underline{x = 8}}$

10. Estimate the product by rounding to the nearest hundred:  $762 \times 225$

$$800 \times 200 = \underline{\underline{160,000}}$$

11. In the division fact,  $57 \div 6 = 9 \text{ R } 3$ , identify the

(a) quotient 9

(b) divisor 6

(c) remainder 3

(d) dividend 57

12. Evaluate each expression.

(a)  $10 - 8 \div 2 = 10 - 4 = \underline{\underline{6}}$

(b)  $6 + 3[15 - \overbrace{2(7-3)}^8 + 1]$   
 $= 6 + 3[15 - 8 + 1] = 6 + 3(8) = 6 + 24 = \underline{\underline{30}}$

13. Compute  $8 \times 23$ .

$$8 \times 23 = 8(20 + 3) = 160 + 24 = \underline{\underline{184}}$$

14. Solve each equation.

(a)  $z \div 5 = 7$

$$z = 7 \times 5 \Rightarrow \underline{\underline{z = 35}}$$

(b)  $12 + h = 20$

$$\begin{array}{r} -12 \quad -12 \\ \hline h = 8 \end{array} \quad \underline{\underline{h = 8}}$$

15. Evaluate:  $[6 \times 3 - 2(24 \div 3)]^3$

$$[18 - 2(8)]^3$$

$$[18 - 16]^3 = 2^3 = 2 \cdot 2 \cdot 2 = \underline{\underline{8}}$$

**Part III** - Circle the best answer for each problem. Each problem is worth 2 points.  
CALCULATORS ARE NOT ALLOWED ON THIS PORTION OF THE TEST.

1. Which one of these expressions is NOT defined?

- (a)  $0 \div 12$
- (b)  $0/4$
- (c)  $9/1$
- (d)  $1 \div 0$

DIVISION BY ZERO IS NOT DEFINED.

2. By using the distributive property, which number should fill in the blank?

$$7 \cdot (5 + 4) = 35 + \underline{28}$$

$35 + 28$

- (a) 28
- (b) 4
- (c) 63
- (d) 0

3. When evaluating the expression  $4 + 6 \cdot (5 - 2) \div 3$ , which operation should be done first?

- (a) multiplication
- (b) division
- (c) subtraction
- (d) addition

PARENTHESES.

4. Which of these is NOT an integer?

- (a) 0
- (b) 5.25
- (c) 13
- (d) -3

5. Think about the following problem:

*Sabrina needs \$3425 for her trip to Australia. She has already saved up \$1769. How much more money does she need?*

Which of these equations can be used solved to solve the problem?

- (a)  $x - 3425 = 1769$
- (b)  $1769 + x = 3425$
- (c)  $3425x = 1769$
- (d)  $x \div 3425 = 1769$