

Assessment Quiz

MAT104 Section F401

January 29th, 2013

Instructions: Exhibit all details. If you cannot solve a problem, give a reason why you leave it blank.(e.g. I did not learn it before, Too difficult, etc.)

0. (1) Print your name as it appears in your CUNY ID card.

(2) Why are you taking this class?

(3) All email notices from this class will be sent to your CUNY email address as it is registered in the CUNY FIRST. If you prefer receiving it at other email address as well, please write it down. Write legibly.

1. Calculate the following if you can:

(1) 123×45

(2) $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7$

(3) $5 \div 3$

(4) $172 \div 13$

(5) $512 \div 256$

(6) $10213 \div 0$

2. Calculate the following:

(1) $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10$

(2) $2 \times 1 + 2 \times 2 + 2 \times 3 + 2 \times 4 + 2 \times 5 + 2 \times 6 + 2 \times 7 + 2 \times 8 + 2 \times 9 + 2 \times 10$

(3) $10213 + 10215 - 10214 + 10219 - 10212 + 10211 - 10216 - 10218 + 10217 - 10210$

3. Calculate the following:

(1) $\frac{1}{2} + \frac{1}{6}$

(2) $\frac{4}{9} - \frac{5}{6}$

(3) $\frac{2}{3} \times \left(-\frac{1}{2}\right)$

(4) $-\frac{5}{8} \div \left(-\frac{3}{4}\right)$

4. Calculate the following:

(1) $(-0.9)(2.7)$

(2) $0.91 + 2.72$

(3) $14.32 \div 2.7$

(4) $-18.354 + 6.97$

5. Write 55% as a fraction.

6. Evaluate

$$\left(-\frac{2}{3}\right)^3 \cdot 3^2$$

7. Decompose 972 as a product of prime numbers.

8. Simplify:

(1) $(9y)4$

(2) $8n - (6 - 2n)$

(3) $-4(-x + 10)$

(4) $\frac{2}{3}x^2 - \frac{7}{12}x^2$

(5) $(-4y^2 + 8)6$

(6) $6x - 3(y - 7x) + 2(5x - y)$

(7) $9(-4) \div [2(8 - 5)^2]$

9. Evaluate:

$$\frac{-3ab}{2a + b}$$

when $a = -1$ and $b = 4$.

10. The distance from Neptune to the sun is thirty times the distance from Earth to the sun. Express the distance from Neptune to the sun in terms of the distance from Earth to the sun.