Assignment 1
Math 212

Solve the following problems. Show all work downward, neat and readable. Use a calculator only if necessary.

1) You decide you need a new computer. The cost of the computer is $744. However, the store also offers a rent to own option which will cost $36 per week for 24 weeks. How much more will the rent to own option cost after you have made all of the payments?

2) Expand and multiply to evaluate each expression:

a) 9^2 b) 5^3 c) 7^2

3) Simplify

a) $7 + 5 \cdot 3$ b) $[10+(-8)]+[12+(-15)]$ c) $7 + 5(-4+9)$

4) Solve the equation:

a) $x - 3 = 4$ b) $t + 2 = 4$

5) John's bank account was overdrawn. The status of his account was $ -115. He did not realize the problem and wrote another check for $67. The bank charged him a $25 fee for being overdrawn. What was the new status of John's account at this point?

6) Subtract the following:

a) —— 7 – (– 14)   b) 7 – 14   c) –7 – (– 14)   d) –7 – 14

7) Fatuma recently hired a roofer to do some necessary work. On the final bill, Fatuma was charged a total of $960. $470 was listed for parts and the rest for labor. If the hourly rate for labor was $35, how many hours of labor was needed to complete the job?

8) Evaluate $-2w + 8p$ for $w = -7$ and $p = -6$

9) Simplify:

a) $-7w^4 + 4w^4$ b) $3x^5 + 2x^4 + 5x^5 + 9 + 4x^4$ c) $4(z - 4) + 3z - 8$

10) Write in lowest terms: $\dfrac{72}{90}$

11) Multiply: a) $\dfrac{1}{4} \bullet \dfrac{2}{5}$ b) $6\dfrac{2}{5} \cdot 2\dfrac{1}{2}$

12) Divide: a) $\left(-\frac{10}{3}\right) \div \left(\frac{16}{9}\right)$ b) $6\frac{1}{2} \div 4\frac{2}{3}$

13) Add: a) $\frac{3}{10} + \frac{1}{6}$ b) $5\frac{2}{3} + 4\frac{3}{4}$

14) Change to a mixed number: $\frac{14}{3}$

15) Write this decimal in numbers: seventy-three and forty-two hundredths

16) Write 0.05 as a fraction in lowest terms.

17) Work the following:

a) $1.2(0.8 + 4.8)^2$ b) $4.2 - 5.9(7.5)$ c) $13.26 \div 5.1$

18) Simplify the following: a) $\sqrt{81}$ b) $\sqrt{36}$

19) Jean's bedroom is 10 feet by 13 feet. She has chosen a carpet which costs $33.60 per square yard. This includes installation. Determine her cost to carpet her room