Ms. Wang
Exam Chapter 6-8.1
Exam A

Name_____
Date_____ Class _____

A. Determine whether the given value is a solution of the equation. Write yes or no (3 pt each).

1) x + 11 = 15; x = 4 _____

2) 36 − 2w = 16; w = 10 _____

3) 0.5v = 1.5; v = 10 _____

4) 15 = 6 + d; d = 10 _____

5) 28 − w = 27+3; w = 2 _____

B. Circle the letter of the equation that each given solution makes true (3 pt each).

6) m=5

    A. 2m+20=30   B. 20-m=30   C. 20+m=15   D. 2m-20=10

7) x= -2

    A. 5x=10   B. -5x=-10   C. -5x=10   D. 5x-2=10

8) m= -2

    A. 2m+20=10   B. 20-m=22   C. 20+m=22   D. 2m-20=10

9) x=5

    A. 4x=-20   B. -4x=20   C. -4x=-20   D. 5x=20

10) m=0.5

    A. 3x=0.9   B.3x=1.3   C. 3x=1.5   D. 5x=2

C. Simplifying the expression (2 pt each).

11) 12-(-2)

12) 14+(-4)

13) 9-(-0.5)

14) 15+(-4)

15) 22+(-0.8)

D. Solve the following equations to find the value of x (4 pt each).

16) x+8 = 12

17) 8-x = 14

18) 25 = 5x

19) 3x+6 = 14+3

20) 4(x+3) = 20

21) -3(x-6) = 13

E. Solve each inequality and graph its solution (3 pt each).

22) m+2 > 7

23) m-2 > 7

24) 3-m < 10

25) -8+m ≥ 19

26) -m-4 < 16+2

F. Simplify Ratios (1 pt each)

27) 6:12

28) 9:27

29) 16:28

30) 7:11

31) 38:36

G. Ratio Word Problems

32) There are 8 pairs of leather shoes and 12 pairs of PU shoes. Write the ratio of leather shoes to PU shoes (5 pt).

33) The ratio of girls to boys in a school ground is 3 to 4. If there are a total of 40 boys in the ground, then how many boys and girls are there altogether? (5 pt)

34) A coach orders a few footballs online. He orders 16 white footballs and 12 black and white footballs.

a) What is the ratio of black to white footballs? (3 pt)

b) What is the ratio of white footballs to all footballs? (3 pt)

Extra Credits (3 pt)

-4(x-5) < 5(x+4) +2