Math 9

Name_____

6.2 Part 1 - Solving Multi-Step Equations

Block____

Solve each equation.

1) $2 - 5x = -6x - 4$

2) $-2 + 5b = 4 + 4b$

3) $3n - 1 = -13 + 6n$

4) $-2 + 8m = 4m + 6$

5) $-2 - 3v = -4v + 4$

6) $8k - 2 = 10 + 4k$

7) $-10 + 4m = 5m - 2$

8) $2 - 8x = 2 + 8x$

9) $8k + 6 = k + 6$

10) $n - 8 = 2 - n$

11) $x + 5.9 = 7.349 + 0.31x$

12) $8.3 - 2.9b = -0.9b + 6.7$

13) $-4(x - 6) = 7x - 9$

14) $13 - 3b = 5(4b - 2)$

15) $8(n + 7) = -7n - 34$

16) $7p + 5 = 2(7p - 1)$

17) $3(5 + n) = -29 - 8n$

18) Five subtract 3 times a number is equal to 3.5 times the same number, subtract 8. Write, then solve an equation to determine the number.

19) Two rental halls are considered for a wedding. Hall A costs $50 per person. Hall B costs $2000, plus $40 per person. Write and solve an equation to determine the number of people for which the halls will cost the SAME to rent.

20) Henry has a choice of two companies to rent a car. Company A charges $199 per week, plus $0.20 per km driven. Company B charges $149 per week, plus $0.25 per km driven. Write and solve an equation to determine the distance Henry must drive for the two rental costs to be the SAME.

Answers to 6.2 Part 1 - Solving Multi-Step Equations

1) $\{-6\}$

2) $\{6\}$

3) $\{4\}$

4) $\{2\}$

5) $\{6\}$

6) $\{3\}$

7) $\{-8\}$

8) $\{0\}$

9) $\{0\}$

10) $\{5\}$

11) $\{2.1\}$

12) $\{0.8\}$

13) $\{3\}$

14) $\{1\}$

15) $\{-6\}$

16) $\{1\}$

17) $\{-4\}$

18) The number is 2.

19) 200 people

20) 1000 km