The Distributive Property

Simplify each expression.

1)
$$6(1-5m)$$

2)
$$-2(1-5v)$$

3)
$$3(4+3r)$$

4)
$$3(6r+8)$$

5)
$$4(8n+2)$$

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

7)
$$-6(7k+11)$$

8)
$$-3(7n+1)$$

9)
$$-6(1+11b)$$

10)
$$-10(a-5)$$

Simplifying Variable Expressions

2)
$$b-3+6-2b$$

3) 7x - x

1) -3p + 6p

4)
$$7p - 10p$$

5)
$$-10v + 6v$$

6)
$$-9r + 10r$$

7)
$$9 + 5r - 9r$$

8)
$$1 - 3v + 10$$

9)
$$5n + 9n$$

10)
$$4b + 6 - 4$$

11)
$$35n - 1 + 46$$

12)
$$-33v - 49v$$

13)
$$30n + 8n$$

14)
$$7x + 31x$$

15)
$$10x + 36 - 38x - 47$$

Two-Step Equations: Decimals

Sheet 1

Solve each equation.

1)
$$0.4x + 2.9 = 1.5$$

2)
$$\frac{V}{2.2} - 0.1 = 7.4$$

3)
$$7 = \frac{a - 9.2}{3}$$

4)
$$-1.3g + 1.9 = -11.1$$

5)
$$-0.9p + 3.2 = -1.7p$$

6)
$$-14.3 = -1.4 - 3d$$

7)
$$14.2 = 2(-5.8 + t)$$

8)
$$-10.6 = \frac{m + 11.7}{0.5}$$

9)
$$\frac{k}{3.5} + 7.4 = 8$$

10)
$$-5.1 - z = 6.5$$

Two-Step Equation Word Problems

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

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2) Aliyah had \$24 to spend on seven pencils. After buying them she had \$10. How much did each pencil cost?

- 3) The sum of three consecutive numbers is 72. What are the smallest of these numbers?
- 4) The sum of three consecutive even numbers is 48. What are the smallest of these numbers?

- 5) You bought a magazine for \$5 and four erasers. You spent a total of \$25. How much did each eraser cost?
- 6) Maria bought seven boxes. A week later half of all her boxes were destroyed in a fire. There are now only 22 boxes left. With how many did she start?

Solving Multi-Step Inequalities

Solve each inequality and graph its solution.

1)
$$-11 \ge 6 - 2n - 5$$

2)
$$0 > -5x - 6x$$

4)
$$-9 > -5n - 4n$$
 $-3 -2 -1 0 1 2 3 4 5 6 7$

5)
$$5k - 2k > -9$$

6)
$$-2 \ge 4p + 6 + 4$$

7)
$$30 - 6a < -3(5 + 7a)$$

8)
$$33 + 4x \le -(x+7)$$