

Name : \_\_\_\_\_



Date: \_\_\_\_\_

### Section 1.2 Homework

Pages 10-12

Order of Operations.

- Simplify what is inside the parentheses.
- Raise to Power
- Multiplication or Division, whatever comes first left to right
- Addition or Subtraction, whatever comes first left to right

Set A

Simplify each by following order of operations.

4)  $8 - 2^2$

6)  $5 \cdot 2^3 + 7$

10)  $4^3 \div 8 + 8$

12)  $24 + 4(3 + 1)$

14)  $24 \div (8 + 4^2)$

18)  $8[20 - (9 - 5)^2]$

Set B

Input the value and simplify using order of operations.

22)  $4n - 12$  when  $n=7$

23)  $2 + 3x^2$  when  $x=3$

24)  $6t^2 - 13$  when  $t=2$

26)  $5(w - 4)$  when  $w=7$

WP

Simplify each. Show all of your work.

34) Your school's booster club sells school T-shirts. Half the T-shirts come from one supplier at a cost of \$5.95 each, and half from another supplier at a cost of \$6.15 each.

The average cost (in dollars) of a T-shirt is given by the expression  $\frac{5.95+6.15}{2}$ .

Find the average cost.

Simplify:  $\frac{5.95+6.15}{2}$

Remember to clear the top before dividing

35) You join an online music service. The total cost (in dollars) of downloading 3 singles at \$0.99 each and 2 albums at \$9.95 each is given by the expression

$$3 \cdot 0.99 + 2 \cdot 9.95$$

a) Find the total cost. Simplify  $3 \cdot 0.99 + 2 \cdot 9.95$

b) You have \$25 to spend. How much will you have left?

36) If you know how tall you were at the age of 2, you can estimate your adult height (in inches).

Girls can use the expression  $25 + 1.7h$  where  $h$  is the height (in inches) at the age of 2.

Boys can use the expression  $22.7 + 1.37h$  where  $h$  is the height (inches) at the age of 2.

Estimate the adult height of each person to the nearest inch.

a) A girl who was 34 inches tall at age 2.

Hint: Use the formula for a girl's height and input 34 for  $h$ .

Copy the formula:

Input the value:

Simplify:

b) A boy who was 33 inches tall at age 2.

Hint: Use the formula for a boy's height and input 33 for  $h$ .

Copy the formula:

Input the value:

Simplify: