

## WS 1.0 Math Skills Update

1. You have 20 beads; 6 of them are red. What is the percentage of red beads?

Ans \_\_\_\_\_

2. A 150 gram sample of chicken soup is 2.5% chicken. How many grams of chicken are in the sample?

Ans \_\_\_\_\_

3. Convert the following into scientific notation:

a.  $1500 =$  \_\_\_\_\_

b.  $123 =$  \_\_\_\_\_

c.  $0.001012 =$  \_\_\_\_\_

d.  $1.52 =$  \_\_\_\_\_

4. Convert the following into decimal notation (ordinary notation):

a.  $4.59 \times 10^3 =$  \_\_\_\_\_

b.  $5 \times 10^2 =$  \_\_\_\_\_

c.  $280 \times 10^{-4} =$  \_\_\_\_\_

d.  $-1.4 \times 10^5 =$  \_\_\_\_\_

5. Solve the following equation:  $4x - 2 = 30$

$x =$  \_\_\_\_\_

6. Given that  $PV=nRT$ , solve (rearrange) the equation for T.

$T =$  \_\_\_\_\_

7. Given the equation:  $\frac{c}{3a} = 4b$   $a = 7, b = 2$ , solve for c.

$c =$  \_\_\_\_\_

8. Given the equation:  $\frac{a}{b} = \frac{c}{d}$  solve for d.

$d =$  \_\_\_\_\_

ANS (IRO): -140000, 0.028,  $1.012 \times 10^{-3}$ ,  $1.52 \times 10^0$ , 3.75, 8, 30,  $1.23 \times 10^2$ , 168, 500,  $1.5 \times 10^3$ , 4590