Beverly Hills High School -- Algebra A -- Quest #1 -- Sections 1.1-1.3 -- 75 points

Show all your work. Be neat and complete. Label all your answers that need them. All problems are three points. NO Copying. Pencils only.

Evaluate each expression.

1)
$$6t - 5$$
 when $t = 3$

2)
$$19 + 4n$$
 when $n = -2$ 3) $2x^3 \div 4$ if $x = 2$

3)
$$2x^3 \div 4$$
 if $x = 2$

4)
$$3k - 4b$$
 when $k = -7$ and $b = -8$ 5) $h + 2/3$ when $h = 42/3$

5)
$$h + 2/3$$
 when $h = 4.2/3$

6)
$$24 \div 6 - 2 \times 8 + 12 - 5 =$$

6)
$$24 \div 6 - 2 \times 8 + 12 - 5 =$$
 7) $(7 - 2)^2 + (4 \cdot 8) - 16 =$

$$\frac{(24-6)-22}{2^4+2^3-12} =$$

9)
$$12(6-3)^2 - 105 =$$

9)
$$12(6-3)^2 - 105 =$$
 10) $-6[20 - (9-5)^2] + 12 \div 6 =$

Write each verbal phrase into a mathematical expression.

- 11) Sixteen more than five times a number
- 12) Eleven decreased by the square of a number
- 13) The quotient of ninety-four and three times a number 14) The difference between eight times a number
 - and five times another number

Write each mathematical expression in correct verbal terms. Read them carefully before turning it in.

17) 17 - 6m _____

18) a² + 9 _____

19) 14d _____

20) 12 ÷ 7y _____

For each of the following, describe which number sets each belongs to (they're all real, so don't write that)...

 $\frac{5}{17}$ _____

22) -81 ____

23) $\sqrt{4\pi}$

24) 0 _____

List the following group of quantities in order, from greatest to least:

25) $\sqrt{37}$, $\frac{18}{3}$, 5.95, $\frac{58}{9}$