N3CS19 Practice Set 19

Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Staple multiple pages. ***If your current grade pct. is ≥82%, you may complete 1 of the 3 sections, yet either KSC or Area 51.***

1) Name the numeric terms in the equation $n-41=-16$

2) Name the numeric coefficient in the expression $\frac{1}{2}mv^2$

3) $6.41\times10^9-9.7\times10^7$ 4) Multiply: $\left(7x^4y^{-3}\right)^3$; write exponents positive.

5) Simplify the radical expression $\sqrt{54}$ 6) Solve for the unknown: $n^2=27$

7) Solve for the unknown: $-8x=12$; simplify solution, keep fractions improper.

8) Solve for the unknown: $n-4.9=13.7$

9) Name *all* the terms in the equation $6x^2-x=12$

10) Name the numeric coefficients in the expression $3x^2-2y+z$

11) $9.7\times10^9\left(6.4\times10^7\right)=$ 12) A triangle has a base of $4x^3cm$ and a height of $4.8x^2cm$; determine the triangle's area. (the formula for area of a triangle can be found in your Agenda book!

13) Simplify the radical expression: $3\sqrt[3]{-1728}$ 14) A square has an area of $6.76cm^2$; what is the length of any side?

15) Solve for the unknown: $-\frac{3}{8}n=27$ 16) Solve for the unknown: $x-\frac{3}{7}=-6$; keep solution as a fraction, simplified and improper.

17) State all the terms in the equation $d=-\frac{1}{2}gt^2+a_0t+s$

18) State the numeric coefficients in the expression $-x^2+3xy-2y^2$

19) Solve for the unknown: $6.4\times10^9\bullet n=1.6\times10^{12}$

20) Simplify the expression; write exponents positive: $\frac{\left(6n^{-2}b^3\right)^3}{36n^{-8}b^6}$

21) A cube has a volume of $2197mm^3$; compute its **surface area** (*hint: the area of all of its sides).*

22) Solve $x^2=\frac{324}{6}$; *Rationalize the denominator and simplify, if possible.*

23) Solve for the unknown: $v-6.75=4\frac{3}{8}$

24) Solve for the unknown: $\frac{3}{8}s=-4.75$