N3CS20 Practice Set 12

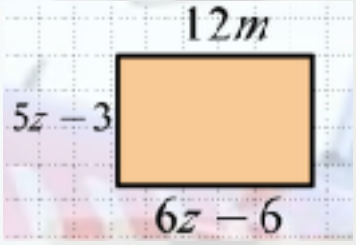
Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Staple multiple pages

1. GV1 pg203 #1
2. Gv1 pg203 #2
3. Gv1 pg203 #3
4. Gv1 pg203#4
5. Gv1 pg203#5
6. Gv1 pg203 #6
7. Gv1 pg203 #7
8. Gv1 pg203 #8
9. Gv1 pg196 #8
10. Gv1 pg197 #16
11. Gv1 pg186 #11
12. Gv1 pg186 #12
13. Gv1 pg178 #20

14. Determine the value of the unknown that makes the statement true:
    a) $3(5n+2)-n=2(n-3)$
    b) $\frac{1}{3}(12-6x)=4-2x$

15. Three times a number, decreased by 8, is the same as twice the number, increased by 15. Determine the number.

16. Determine the area of the rectangle in the figure:



17. How many times larger is a light year, $9.5 \cdot 10^{15} m$, to a light-second, $3 \cdot 10^{8} m$? ***Express your solution in scientific notation AND standard form!*** Round your final decimal in Scientific Notation to the nearest 10th.

18. Simplify: express your exponents as positive:

$$\frac{2^7 \cdot 3^{-2} \cdot 4^{-1}}{2^{-5} \cdot 3^3 \cdot 4^5}$$

19. Which of the following are equivalent to $3^{-8} \cdot 3^4$?
    A) 3^{-2} B) 3^{-4} C) 3^{-12} D) 3^{-32}

20. Which is a solution to the equation $x^3 = \frac{8}{27}$?
    A) $\frac{2}{3}$ B) $\sqrt[3]{\frac{2}{3}}$ C) $\sqrt[3]{\frac{3}{2}}$ D) $\frac{3}{2}$

21. Determine the perimeter of a square whose area is $8m$. *No calculator needed; (hint) simplify your radical expression!*

22. Write the repeating decimal as a fraction:
    a) $0.6\overline{4}$
    b) $0.\overline{64}$
    c) $0.56\overline{4}$