

N3CS19

Practice Set 23

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) Simplify the expression $2x + 8 - x + 9$
- 2) Simplify the expression $4 - 2x + 3 - 5x$
- 3) Simplify the expression $3x^2 + 2x - x^2 - 4x + 1$
- 4) Simplify the expression: $6 - (x - 3) + 4x - 5$
- 5) Determine the value of the unknown that makes the statement true: $-\frac{n}{8} = -5$
- 6) Determine the value of the unknown that makes the statement true: $6 - \frac{n}{8} = -2$

- 7) Write the repeating decimal as a fraction: $0.\overline{84}$
- 8) Write the repeating decimal as a fraction: $0.8\overline{4}$
- 9) Your current grade is 68.3%; you want to raise it 7 points. To what number families does the new grade percent belong ?



- 10) Simplify the expression $\frac{(3^2 w^3 x^5 y^4)^3}{3^4 w^8 x^{13} y^3}$
- 11) Which of the following is equivalent to $(2^{-4} \cdot 2^3)^3$? Select all that apply.
 A) $\frac{1}{8}$ B) 8 C) $2^{-12} \cdot 2^9$ D) $2^{-1} \cdot 2^6$

- 12) Determine the difference, in Scientific Notation: $(9.5 \cdot 10^5) - (2.3 \cdot 10^4)$

- 13) To which of these equations is $x = \frac{\sqrt{6}}{3}$ a solution?
 A) $x^2 = \frac{2}{3}$ B) $x^3 = \frac{2}{3}$ C) $x^2 = \frac{3}{2}$ D) $x^3 = \frac{3}{2}$
- 14) Is $8 - \sqrt{3}$ between 6 and 8 on a number line? Justify with evidence!
- 15) How many times smaller is $8 \cdot 10^{-4}$ to $2 \cdot 10^{-1}$?
- 16) Simplify the expression: $14(2 \div 3 - 2 \cdot 2) \div (4^2 - 3^2)$

