

N3CS19

Practice Set 25

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: $8 - \frac{3}{4}(12x - 4) + 7x$

2) Determine the value of the unknown that makes the statement true: $5 - 3n = 2n - 10$

3) Determine the value of the unknown that makes the statement true: $6 + 2n = -8n$

4) Solve the linear equation $\frac{x}{5} - 2 = -27$

a) $x = -125$ b) $x = 125$ c) $x = -\frac{29}{5}$ d) $x = -145$

5) Multiply: $-5z(7 - 15)$

6) Evaluate the following square root: $\sqrt{216}$

a) $6\sqrt{6}$ b) $36\sqrt{6}$ c) 16 d) $9\sqrt{6}$

7) The area of a square is 676mm^2 ; determine the perimeter of the square.

8) Calculate the quotient, and write the quotient in scientific notation: $\frac{4.8 \cdot 10^4}{4 \cdot 10^0} =$

9) Which of the following expressions are greater than 6 but less than 8?

a) $\sqrt{45}$ b) $\sqrt{59}$ c) $\sqrt{81}$

10) Elaine is buying cube shaped blocks to add to her mantle as decoration. She needs the dimensions of the cube to be **less** than 5 inches along each edge. Which of the following would work according to the size she needs?

a) A cube with a volume of 64in^3

b) A cube with a volume of 125in^3

c) Both 'a' and 'b' would work

11) Solve and express your answer in both Scientific Notation and Standard Form:

$0.000075 + (1.3 \cdot 10^{-5})$

12) Determine a number that is 68 greater than 3 times its opposite.

