## Practice Set 30

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

Translate into the appropriate math statements:

- 1) An expression for the sum of 3 consecutive integers
- 2) An expression for the sum of 3 consecutive even integers
- 3) An expression for the sum of 3 consecutive odd integers
- 4) An expression for the sum of 4 consecutive even integers
- 5) 4 times the sum of a number and 5 is 3 less than twice the number.
- 6) one-half the difference of a number and 6 is 4 more than 3 times the sum of the number and 2



7) Simplify; write as exponents positive:  $\frac{w^{\circ}}{1111}$ 

- 8) Simplify; write as exponents positive:  $\frac{x^{\circ}}{x^{-13}}$
- 9) Simplify: write as exponents positive:  $\frac{y^{-13}}{y^{-13}}$
- 10)  $\frac{4}{9} + \frac{5}{6}$ ; simplify and keep improper
- 11) Write as a fraction: 0.39
- 12) Write as the product of its simplest rational and irrational factors:  $\sqrt{80}$

13) 
$$n^2 = 841$$

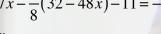
$$n^3 = -729$$

13) 
$$n^2 = 841$$
 $n =$ 
14)  $n^3 = -729$ 
 $n =$ 
15)  $(2.4 \cdot 10^4) \cdot (6 \cdot 10^3) =$ 

16) 
$$\frac{2.4 \cdot 10^8}{6 \cdot 10^4} =$$

- 17) The volume of a cube is  $512cm^3$ ; what is the area of one of its faces?
- 18) The area of a square is  $256in^2$ ; what is the square's perimeter?

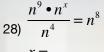
- 19) Simplify: 6-2(3-x) 20) Simplify: 7-3(4-2x)+5x 21) Simplify: 8x-4(5-3x)-7
- 22) Simplify:  $6 \frac{3}{4}(12 8x) 5x$  23) Solve for the unknown:  $7 \frac{2}{3}n = 3$
- 24) Solve for the unknown: 7-4n=25+2n 25) Solve for the unknown: 3(m+5)-6=3(m+3)
- 26) Solve for the unknown:  $7x \frac{1}{8}(32 48x) 11 = -12$





- 27) Which of the following has the greatest value?

- A)  $(3^{-2})^3$  B)  $(3^2)^3$  C)  $3^2 \cdot 3^3$  D)  $\frac{3^3}{3^2}$



29) Between which two integers is  $20 - \sqrt{10}$ ?



30) Solve the formula  $E = mc^2$  for 'c'.

