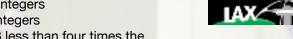
N3CS19

Practice Set 31

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) The sum of 3 consecutive integers is 54; determine the integers
- 2) The sum of 3 consecutive even integers is 54; determine the integers
- 3) The sum of 3 consecutive odd integers is 57; determine the integers



- 4) #PushTheEnvelope: The sum of 3 consecutive integers is 13 less than four times the smallest; what are the integers?
- 5) The perimeter of a rectangle is 56 cm and its length is 8cm more than the width. Find the length and the width.
- 6) Imani swims the four times a week at her club's pool. She swims the same number of laps on Monday, Wednesday, and Friday, and 15 laps on Saturday. She swims a total of 51 laps each week. How many laps does Imani swim on Monday?



7) Solve for the unknown: b - (5-3b) + (b-1) = -6b =

- 8) #PushTheEnvelope: Solve for the unknown: $\frac{3x+2}{4} = -7$
- 9) Solve for the unknown: -5 + 2(x + 4) = 3 + 2x
- 10) Solve for the unknown: $3x \frac{1}{4}(20 24x) 5 = -6$

$$\begin{array}{r}
 x = \\
 5 - 4(3 - 2x) = 6 + 7(8 - 9x) \\
 x =
 \end{array}$$

- 12) #PushTheEnvelope: $\frac{3}{8} + \frac{5}{6} =$; show your solution as an improper fraction, mixed number, and decimal rounded to the nearest 10th.
- 13) Simplify; keep exponents positive: $\frac{n^{-8}}{n^5}$ 14) Simplify; keep exponents positive: $\frac{\left(3x^{-2}\right)^3}{18x^3}$
- 15) Write as the product of its simplest rational and irrational factors: $\sqrt{56}$

16)
$$b^2 = 5$$
 b = 17) The area of a square is $361cm^2$; determine its perimeter.

- 18) The volume of a cube is $343mm^3$; determine the surface area of the cube.
- 19) Write as a fraction: $0.6\overline{3}$ 20) $(9 \cdot 10^4) \cdot (1.2 \cdot 10^5) =$ 21) $\frac{1.2 \cdot 10^6}{9.6 \cdot 10^{-3}} =$



- 22) The expression $23 \sqrt{20}$ is between which two integers on a number line?
- 23) Solve the formula y = mx + b for 'm'.
- 24) Find three consecutive even integers such that the sum of the smallest and largest is 36.
- 25) Mel is 3 years older that Rahfat and Aurelio is twice as old as Mel. The sum of their ages is 57. How old is Mel?
- 26) Grandpa Dexter is 75 years old. this is 9 years less than seven times the age of Junior Anthony. How old is Anthony?
- 27) The New England Patriots have been to 9 Super Bowls, which is 3 more than twice the number the Rams have been to. Translate that relationship into an algebraic equation.
- 28) In the expression $\frac{1}{x}$, what does the value do as 'x' gets smaller and smaller? Justify with evidence.
- 29) Mr. Ford spent \$5 on PopTarts in the CCCS vending machines; how many PopTarts did he buy?

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