

N3CS19

Practice Set 44: **SLOPI!**

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

Evaluate: round your solutions to the nearest 10th

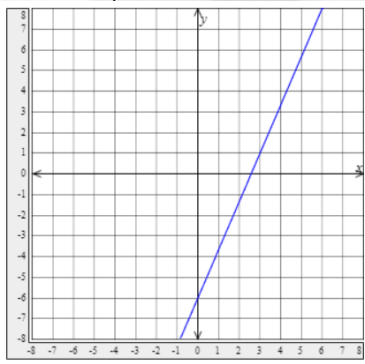
1. $31.29 + 17.88$
2. $47.13 - 29.67$
3. $(88.9)(91.5)$
4. $1991 \div 27$
5. Evaluate; write solutions as either a mixed number if the decimal repeats, or a terminating decimal.
 - a) $16 - 8\frac{4}{9}$ b) $12\frac{3}{8} - 9\frac{7}{6}$ c) $12.\bar{7} - 8.6$
6. Re-write each expression using the Definition of Subtraction, then add:
 - a) $21 - (-37)$ b) $41 - 79$ c) $-17 - (-42) =$ d) $-38 + (9 - 16) =$ e) $47 - (37 - 59)$
7. Simplify:
 - a) $9 - 5(x - 6)$ b) $19 - 7(6 - 8x)$ c) $12x - 4(3 - 6x)$ d) $-17x - 7(6 - 8x) + 31$
8. Solve for the unknown: express solutions as either mixed numbers if the decimal repeats, or terminating decimals.
 - a) $\frac{5}{7}n - 2 = -4$ b) $9 - \frac{8}{3}p = -5$ c) $13 - 6q = -10$



9. Write the point-slope form of a line that has the given slope and passes through the given point.



- a) $m = 2; (3, 2)$ b) $m = -5; (-1, 3)$ c) $m = \frac{1}{2}; (6, 1)$
10. Write the point-slope form of a line that passes through the given points:
 - a) $(1, 5); (2, 7)$ b) $(2, -3); (4, -2)$
11. Gv1 pg. 213 #4
12. Gv1 pg. 214 #6
13. Write the following equations in slope-intercept form and graph them
 - a. $3x + 4y = 16$ b) $x - 3y = 6$
14. Write an equation for the line in the graph:



15. Sarah's weekly pay varies directly to the number of hours she works at the record store. Her pay is \$174 for 24 hours of work. What is her pay for 40 hours of work?
16. Mr. Ford, while playing Elite Dangerous, on PS4(Pro) stepped away from the console to make some tea. On autopilot his ship, the *Akili Meator*, accelerated to 1024c, or 1,024 times the speed of light! What is this speed in m/s, in scientific notation? *Do your math in scientific notation!*
17. Solve: $12(x - 3) + 5 = 4(3x + 5)$
18. Solve: $\frac{2}{3}(12x - 6) - 4x = -9 + 3(4 - 7x)$
19. A square has an area of $1024m^2$; what is the square's perimeter?

N3CS19

Practice Set 44: **SLOPI!**

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

20. A cube has a volume of $1331in^3$; what is the cube's surface area?

21. Write as exponents positive: $\frac{-19u^5v^5}{-57u^6v^{-6}}$

22. Multiply; write as exponents positive: $6a^5b^{-7}(3a^{-6}b^8)^2$

23. In scientific notation, what is the difference of $1.3671 \cdot 10^{10} - 4.768 \cdot 10^9$?

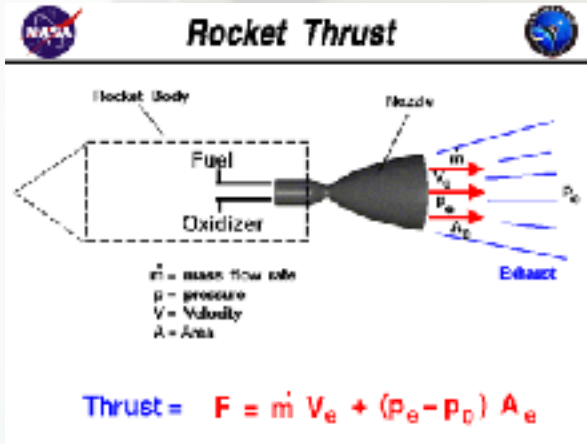
24. Which of the following expressions are greater than 6 but less than 8?

- A) $\sqrt{45}$ B) $\sqrt{59}$ C) $\sqrt{81}$

25. Gv1 pg. 205 #24

26. Gv1. pg. 216 #16

27. From the figure below, solve the Thrust equation for V_e , exit velocity. Hint: treat $(p_e - p_o)$ as one value.



28. Write the slope-intercept form of an equation that has a slope of zero and a y-intercept of 3.