

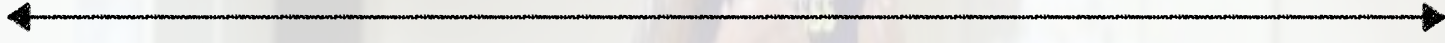
N3CS19

Practice Set 43: 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

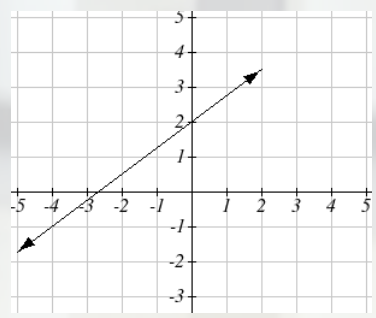


- Evaluate: round your solutions to the nearest 10th
1. $65.81 + 17.79$
 2. $78.04 - 29.89$
 3. $(84.3)(79.2)$
 4. $1991 \div 30$
 5. Evaluate; write solutions as either a mixed number if the decimal repeats, or a terminating decimal.
 - a) $7.25 - 2.\overline{36}$
 6. Re-write each expression using the Definition of Subtraction, then add:
 - a) $-46 - (13 - 26)$
 7. Simplify:
 - a) $17x - 8(9 - 6x) + 53$
 8. Solve for the unknown: express solutions as either mixed numbers if the decimal repeats, or terminating decimals.
 - a) $\frac{7}{5}n - 3 = -9$ b) $18 - \frac{9}{4}p = -6$ c) $23 - 6q = -8$



9. Determine the slope-intercept form of a line that passes through the given point with the given slope:
 - a) $m = 2; (-3, 1)$ b) $m = \frac{3}{2}; (0, 3)$
10. Determine the slope-intercept form of a line that passes through the given points:
 - a) $(3, 4); (2, 6)$ b) $(3, -1); (6, 7)$
11. Gv1 pg. 203 # 8
12. Anthony Allen is eating 72 oz. of potato chips in a bowl on his table while playing video games. He eats them 3oz at a time. His dog, Lil'Bogard, tries to steal his potato chips, and gobbles 6oz at a time.
 - a) Model as an equation of Anthony (x) and his dog (y) eating 72 oz. of potato chips.
 - b) Graph this relationship and interpret the axis intercepts.
13. Write the following equations in slope-intercept form and graph them
 - a. $2x - 4y = -8$ b. $2x + 6y = -18$
14. Use the slope formula, $m = \frac{y_2 - y_1}{x_2 - x_1}$, to find the slope between the given two points.
 - a) $(-6, -9); (6, -3)$

15. Determine the slope-intercept form of the line in the figure below:



16. The number of calories in a container of milk is directly proportional to the amount of milk in the container. If there are 160 calories in an 8 oz glass of milk, find the number of calories in a 15 oz glass of milk.
17. Solve: $6(x - 4) + 12 = 2(3x - 6)$

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18. Solve: $5x - \frac{1}{6}(12 - 18x) - 9 = 4x - 5(6 - 7x) - 8$

19. A square has an area of $841m^2$; what is the square's perimeter?

20. A cube has a volume of $125in^3$; what is the cube's surface area?

21. Write as exponents positive: $\frac{-40u^{-8}v^{-8}}{18u^{-10}v^{-6}}$

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

23. In scientific notation, what is the difference of $3.78 \cdot 10^8 - 9.996 \cdot 10^7$?

24. Since $\sqrt{49} = 7$ and $\sqrt{64} = 8$, which would be a reasonable value for $\sqrt{59}$?

- A) 6.24 B) 7.68 C) 8.31 D) 9.43

25. Last night I discovered a large blue-white star that was 12,300 million years old. The Earth is over 4,600 million years old.

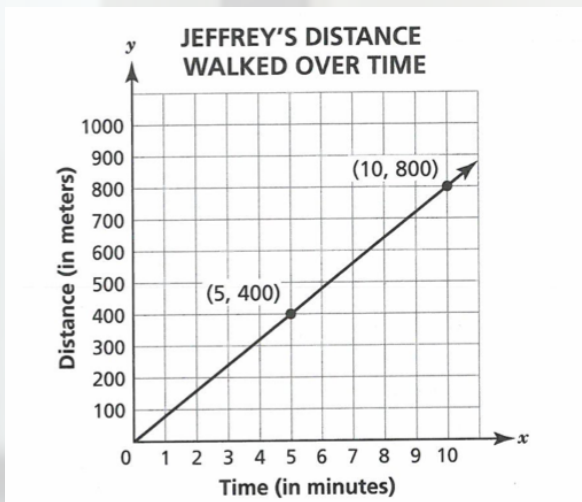
- a) Write both of these values in Scientific notation
 b) How many times older is this blue-white star to Earth?

Perform your calculations in scientific notation; round your decimal answers to the nearest 10th



26.

Jeffrey and Fumi walk at different speeds. Fumi's walking speed can be represented by the equation $y = 85x$, where x is the time in minutes and y is the distance in meters. The distance Jeffrey walked over time is shown in the graph below. Which of the statements below is true.



- A. Jeffrey walks 5 meters per minute faster than Fumi.
- B. Jeffrey walks 10 meters per minute faster than Fumi.
- C. Jeffrey walks 5 meters per minute slower than Fumi.