

N3CS19

Practice Set 41: **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



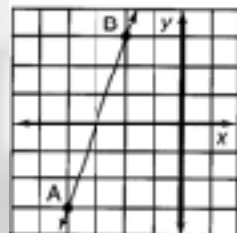
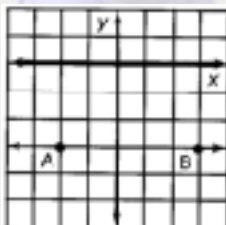
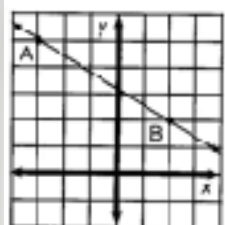
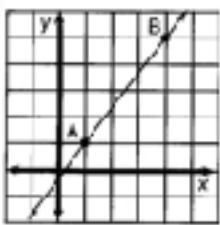
- Evaluate: round your solutions to the nearest 10th
- $12.47 + 6.98$
 - $18.52 - 7.68$
 - $(9.57)(3.4)$
 - $1995 \div 12$
 - Reduce the following fractions to lowest terms:
 - $\frac{16}{40}$
 - $\frac{18}{42}$
 - $\frac{48}{68}$
 - $\frac{96}{36}$
 - Evaluate; write solutions as either a mixed number if the decimal repeats, or a terminating decimal.
 - $12 - 3\frac{3}{8} =$
 - $4\frac{2}{3} + 2\frac{7}{9} =$
 - $\frac{7}{3} - 1\frac{5}{7} =$
 - $4.6 - 2.\bar{4}$
 - Re-write each expression using the Definition of Subtraction, then add:
 - $3 - (-13) =$
 - $13 - 21 =$
 - $-18 - (-16) =$
 - $5 + (9 - 16) =$
 - $11 - (17 - 21) =$
 - Simplify:
 - $6 - 2(x - 5)$
 - $5 - 7(3 - 2x)$
 - $6x - 4(3 - 2x)$
 - $3x - 4(2 - 5x) + 13$
 - Solve for the unknown: express solutions as either mixed numbers if the decimal repeats, or terminating decimals.
 - $\frac{1}{8}n - 6 = -4$
 - $12 - \frac{4}{5}p = -6$
 - $\frac{7}{3}t - 5 = -16$
 - $7 - 9q = -13$

10. Write the following equations in Slope-Intercept Form, (solve for 'y' in terms of 'x'), then identify the slope 'm' and the y-intercept 'b'.



- $5x + 2y = 6$
- $x - 4y = -8$
- $6x - y = 4$
- $8x - 5y = 0$

11. Determine the slopes of the graphs:



- -
 -
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- Determine the slope of the line that goes through the given points:
 - $(2, 1); (5, 3)$
 - $(-4, -8); (-2, 0)$
 - $(-5, 8); (-4, 2)$
 - $(0, -1); (4, -7)$

- The kilograms of water in a person's body varies directly with the person's mass. A person with a mass of 90kg contains 60kg of water. How much water does a person contain who has a mass of 50 kg?
- Solve: $8(-7x + 6) = 5 - 4(3 - 2x)$
- Solve: $-5 - (15y - 1) = 2(7y - 16) - y$

16. Solve $T = S + \frac{1}{2}\rho v^2$ for 'v' using the following steps:



- add the inverse of 'S' to both sides of equation
- Multiply both sides of equation by reciprocal of $\frac{1}{2}$; simplify

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c) Multiply both sides of equation by reciprocal of ρ ; simplify

d) Solve the square equation if $v^2 =$
 $v = ?$

17.

- 40 This graph shows a proportional relationship between the amount of money in Jack's savings account and the number of weeks Jack has been saving money.



Which statement identifies the correct slope, and the correct interpretation of the slope for this situation?

- A. The slope of the line is $\frac{6}{1}$, so Jack's savings rate is \$6 per week.
- B. The slope of the line is $\frac{6}{1}$, so Jack's savings is \$1 for every 6 weeks.
- C. The slope of the line is $\frac{1}{6}$, so Jack's savings is \$6 for every 1 weeks.
- D. The slope of the line is $\frac{1}{6}$, so Jack's savings is \$1 for every 6 weeks.