

Chapter 2
Form B

For problems 1 – 6, solve the equation.

1. $6x - 9 = 21$

1. _____

2. $-8 + 3x = 4x - 5 + 2x - 2$

2. _____

3. $3y - 7(y + 4) = -y + 6 - 3y$

3. _____

4. $\frac{1}{2}(4x - 6) = -3x + 2$

4. _____

5. $-(3z + 8) - 9 = 17 + 3z$

5. _____

6. $15 - \frac{2x}{3} = \left(-\frac{4x}{6} + 8\right) + 7$

6. _____

For problems 7 – 10, solve each inequality.

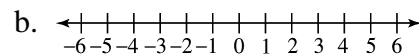
a. Express the solution set in set-builder notation.

b. Graph the set on a number line.

If the inequality has no solution or is true for all real numbers, so state.

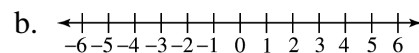
7. $7x - 4 \geq 3x$

7a. _____



8. $2x + 8 \leq 4x - 2(x + 5)$

8a. _____

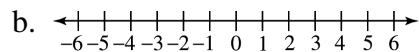


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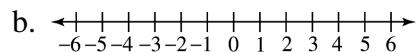
9. $13 - (2x + 4) < -1 + 3x$

9a. _____



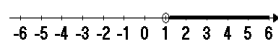
10. $4 - x + 3(5 + x) < 25$

10a. _____



11. Use set builder notation to describe the following graph.

11. _____



12. Solve $x + 2y = 6$ for y .

12. _____

13. Solve $A = P + Prt$ for r .

13. _____

14. What is 125% of 800?

14. _____

15. 260 is 65% of what number?

15. _____

16. 42 is what percent of 672?

16. _____

17. Find the measure of the supplement of a 27° angle.

17. _____

18. The sales tax is 6%. If the total cost of a book (including tax) is \$33.92, what is the price of the book before tax?

18. _____

Name _____

Date _____

19. One cookie jar contains sugar cookies and another jar contains chocolate chip cookies. If there are 2 dozen more sugar cookies than chocolate chip cookies and 96 cookies in total, how many of each type of cookie are there? 19. _____

20. A student has made an 89, 72, 91, and 72 on four major exams. Determine the possible score on the fifth exam that will result in a 75 or higher average. 20. _____