# NTI Packets

# Days 1 -5

# Algebra I Part B

Complete the work for the corresponding NTI day.

| | |
|---|---|
| Day 1 | Chapter 2 test form A problems 1-13 and 20-23 |
| Day 2 | Chapter 3 test form B problems 2 -28 even |
| Day 3 | Chapter 6 test form A problems 1 -25 odd |
| Day 4 | Chapter 6 test form B problems 1 -25 odd |
| Day 5 | Chapter 7 test from A problems 1 – 14 all |

*******Please do work on a separate sheet of paper.

Each days' work will be due no later than 3 days after we return to school. If a student is absent on the days we return to school, they still only have the 3 days from the return of school. If in an extreme situation where a student is out the first 3 days we return from a snow day then the work will be due the first day that they return to school.

Name _____ Class _____ Date _____

# Chapter Test

**Form A**

*Chapter 2*

Day 1

**Solve each equation. Then check your answer.**

1. $8f = 32$
2. $b - 13 = -24$
3. $\frac{k}{5} = 11$
4. $w + 7 = 4$
5. $5n - 7 = 28$
6. $-3x + 4 = -20$
7. $7y + 5 - 3y = -31$
8. $-11.4x + 5.4x = 48$
9. $8(t + 7) = 32$
10. $\frac{1}{4}(p + 2) = 12$
11. $\frac{2h - 6}{6} = \frac{2}{3}$
12. $6(w - 5) - 3w = 12$
13. If $4x - 3 = -31$, what is the value of $-2x + 11$?
14. Solve $3x - 6 = -15$. Justify each step.

**Solve each formula in terms of the given variable.**

15. $x = \frac{y - z}{5}$; $y$
16. $2b - 7c = 9$; $b$

**Define a variable and write an equation to model each situation. Then solve.**

17. The foreign language club began the year with \$15.00 in its account. At the end of the candy sale, the club had \$654.75 in its account. How much money did the club make?
18. An online music club sells compact discs for \$13.95 each plus \$1.95 shipping and handling per order. If Maria's total bill was \$85.65, how many compact discs did Maria purchase?
19. Tickets to the county fair for four adults and five children cost \$33.00. An adult's ticket costs \$1.50 more than a child's ticket. Find the cost of an adult's ticket.

**Solve. If the equation is an identity, write *identity*. If it has no solution, write *no solution*.**

20. $18x + 6 = 3(6x + 1)$
21. $8w - 18 = 12w + 14$
22. $4(2 - 4y) = 8y + 36$
23. $3(x + 8) + 5x = 2(12 + 4x)$
24. **Open-Ended** Write a word problem that could be solved using the equation $2x + 8 = 12$.

Name _____ Class _____ Date _____

# Chapter Test

**Form B**

*Chapter 3*

Day 2
Even
2-28

**Is each number a solution of the given inequality?**

**1.** $3y + 4 \geq -10$

**a.** $-2$ **b.** 2 **c.** $-5$

**2.** $-5x + 4 \leq 9$

**a.** $-2$ **b.** 0 **c.** 3

**Write an inequality to model each situation.**

**3.** The package must weigh less than 25 lb.

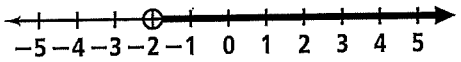
**4.** The houses must be more than 12 ft apart.

**5.** Tickets to the movie cost at least $3.50.

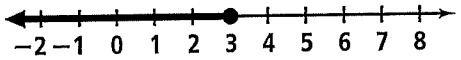
**6.** The wind speed is greater than 10 mi/h.

**Write an inequality for each graph.**

**7.**




**8.**

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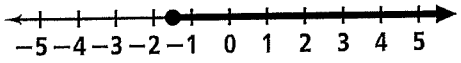


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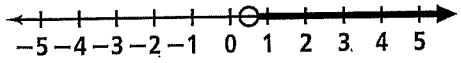



**Solve each inequality. Graph the solution.**

**11.** $-\frac{1}{3}x < 12$

**12.** $7y - 11 \leq 17$

**13.** $-8 < 4h < 24$

**14.** $-\frac{2}{3}a > 8$

**15.** $|a - 4| \geq 8$

**16.** $|4m + 2| \geq 14$

**17.** $-2 \leq t - 4 < 3$

**18.** $8x < 40$ and $3 - x \leq 2$

**19.** $-48 \geq 8y$

**20.** $3r > 27$ or $-4r - 6 > 14$

**21.** $k + 14 > 10$

**22.** $9z \geq 2z + 35$

**23.** $17 - x > 3$

**24.** $3y + 9 < -7y - 11$

**25.** $2|d - 2| + 3 < 9$

**Solve each inequality. Check your solution.**

**26.** $6(y - 5) > 12$

**27.** $3(4x - 2) \leq 2(5x - 8)$

**28.** $7a - (4a + 2) > 8$

**29.** $0.5(x + 4) - 3.4 \geq -2$

**30.** **Writing** Explain how to solve $|x| + 4 < 9$.

Name _____ Class _____ Date _____

# Chapter Test — Form A

*Chapter 6*

Day 3

odd 1-25

**Tell whether each statement is true or false. Explain.**

1. A rate of change must be negative.
2. The rate of change for a vertical line is zero.

**Find the slope of the line passing through each pair of points.**

3. $(-3, -1), (-1, 5)$
4. $\left(-\frac{3}{4}, 5\right), \left(\frac{5}{4}, 2\right)$

**Graph each equation.**

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

**Write each equation in slope-intercept form.**

9. $2x - 3y = 9$
10. $x - 4y = -20$
11. $6x + 9y = 27$
12. $7x = 3y - 12$

**Find the *x*- and *y*-intercepts of each line.**

13. $6x + 12y = 24$
14. $-5x + 3y = -24$
15. $-8x + 4y = 48$
16. $x - y = 5$

**Write an equation in point-slope form for the line with the given slope and passes through the given point.**

17. $m = \frac{1}{4}; (0, -2)$
18. $m = -2; (0, 1)$
19. $m = -\frac{7}{6}; (0, 2)$
20. $m = -\frac{8}{3}; (3, -3)$

**Write an equation in slope-intercept form for the line through the given points.**

21. $(2, 3); (1, 5)$
22. $(5, -2); (-16, 4)$
23. $(2, -4); (11, -4)$
24. $(7, 5); \left(-1, \frac{1}{5}\right)$
25. Tell whether each of the following lines is *parallel*, *perpendicular*, or *neither* to $y = -\frac{5}{3}x + \frac{3}{5}$.
    - **a.** $3y = -3x + 5$
    - **b.** $15y = -25x + 9$
    - **c.** $y = \frac{3}{5}x - 2$
    - **d.** $5y + 3x = 15$

Name _____ Class _____ Date _____

# Chapter Test — Form B

*Chapter 6*

Day 4

6dd
1-25

**Tell whether each statement is true or false. Explain.**

1. A rate of change and the slope of the line are different quantities.

2. The rate of change for a vertical line is undefined.

**Find the slope of the line passing through each pair of points.**

3. $(-5, -10), (-4, 7)$

4. $\left(\frac{1}{2}, -1\right), \left(3, -\frac{3}{4}\right)$

**Graph each equation.**

5. $2x + y = 4$

6. $4x - y = 5$

7. $y = \frac{1}{4}x + 1$

8. $y - 4 = -3(x + 2)$

**Write each equation in slope-intercept form.**

9. $4x + 5y = 20$

10. $-x + 5y = 15$

11. $4x + 8y = 16$

12. $8x = 5y - 16$

**Find the *x*- and *y*-intercepts of each line.**

13. $5x + 10y = 30$

14. $-7x - 2y = -8$

15. $-6x + 9y = 36$

16. $x + y = 3$

**Write an equation in point-slope form for the line with the given slope and through the given point.**

17. $m = \frac{2}{3}; (1, 2)$

18. $m = -1; (0, 3)$

19. $m = -\frac{1}{4}; (-1, 4)$

20. $m = -\frac{5}{7}; (7, -3)$

**Write an equation in slope-intercept form for the line through the given points.**

21. $(5, 2); (1, 3)$

22. $(2, 6); (1, 2)$

23. $(-2, 2); (4, 2)$

24. $(4, -2); (3, 8)$

25. Tell whether each of the following lines is *parallel*, *perpendicular*, or *neither* to $y = \frac{5}{3}x + 3$.

   a. $y = \frac{5}{3}x + \frac{5}{3}$

   b. $y = -3x + 5$

   c. $3x - 5y = 10$

   d. $5y + 3x = 15$

Name _____ Class _____ Date _____

# Chapter Test — Form A

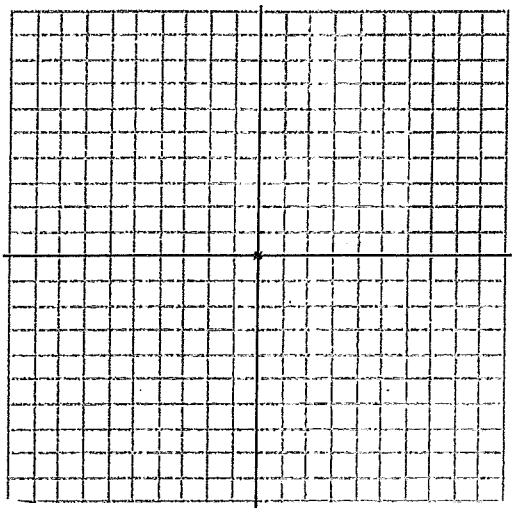
*Chapter 7*

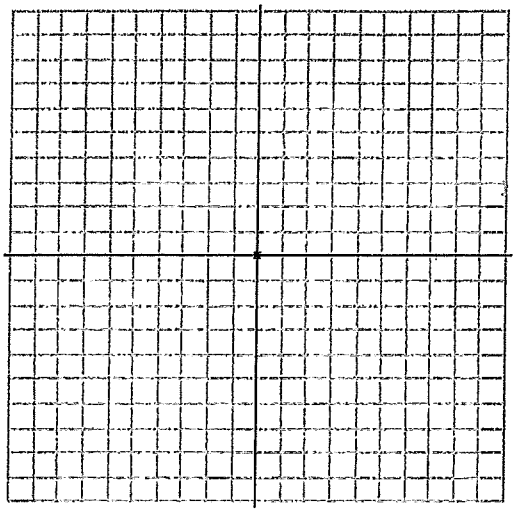
Day 5
All

**Solve each system by graphing. Show your work.**

**1.** $y = -3x - 3$
$y = x + 5$

**2.** $3x - 5y = 6$
$6x + 2y = -24$





**Solve each system using substitution. Show your work.**

3. $y = 2x + 11$
$y = -x + 5$

4. $y = 4x - 3$
$y = 5x - 1$

5. $y = x - 1$
$y = -3x - 5$

6. $y = 2x + 5$
$y = 7x + 25$

**Solve each system by elimination. Show your work.**

7. $5x - 4y = -3$
$-3x + 4y = 5$

8. $-x + 6y = 11$
$x - 2y = 1$

9. $x + 3y = 6$
$2x + y = -8$

10. $-4x + 3y = -12$
$3x - 2y = 9$

11. $x - 3y = 9$
$-x + 2y = 1$

12. $4x - 5y = 11$
$6x + 7y = 31$

13. $-5x - 4y = -11$
$10x + y = -6$

14. $13x + y = 15$
$-9x - 3y = -15$