Name: _____

Complete all questions. Show your work on a separate piece of paper and attach. No work no credit!

1. ☐ When you solve $4(x + 2) = 22$, you must simplify the equation first. What would the first step look like?

A. $4x + 8 = 22$
B. $4x + 2 = 22$
C. $x + 8 = 22$
D. $x + 2 = 22$

2. ☐ The following expression, $-7b - 9ac + 4b + 12ac$, is equivalent to

A. $-3ac + 3b$
B. $3ac - 3b$
C. $ac - b$
D. $3b - 3ac$

3. ☐ Simplify the expression: $5(2n - 3) + 4(-3n + 2)$

A. -9
B. $8n - 1$
C. $-2n - 1$
D. $-2n - 7$

4. ☐ Which expression is equivalent to $-3(2x+1)-\frac{2}{3}(6x-9)$?

A. $-10x - 8$
B. $-10x + 3$
C. $-2x - 8$
D. $-2x + 3$

5. ☐ The expression $3xy - (2x + 4xy)$ is equivalent to

A. $-2x - xy$
B. $xy - 2x$
C. $xy + 2x$
D. $2x - xy$

6. ☐ Solve for x: $6(x - 2) - 4x = 16$

A. 2
B. 7
C. 12
D. 14

7. ☐ The difference between $25ab$ and $37ab$ is

A. $12ab$
B. -12
C. 12
D. $-12ab$

8. ☐ The sum of $-xy$ and $-9xy$ is

A. $8xy$
B. -10
C. $-8xy$
D. $-10xy$

9. ☐ Simplify this expression $15x - 9 - 5q + x$.

A. $16x - 5q - 9$
B. $16x + 5q - 9$
C. $9x - 9$
D. $10x - 9$

10. ☐ Solve for x: $\frac{x}{4} + 7 = 5$

A. 8
B. -8
C. 3
D. $-\frac{1}{2}$

11. [ ] Heather planted tomato plants when they were $8\frac{3}{4}$ inches tall. The plants grew $3\frac{1}{4}$ inches per week. When Heather started to pick the tomatoes, the plants were $44\frac{1}{2}$ inches tall. How many weeks ago did Heather plant the tomato plants?

A. 10
B. 11
C. 12
D. 13

12. [ ] The sum of $-81bc$ and $7bc$ is

A. $-74bc$
B. $-88bc$
C. $74bc$
D. $88bc$

13. [ ] Solve $6 - x = -4$

A. $x = 9$
B. $x = -9$
C. $x = 10$
D. $x = -10$

14. [ ] The expression $2x(y - 1) - 7xy + 2x$ is equivalent to

A. $-5xy - 4x$
B. $-5xy + 4x$
C. $5xy$
D. $-5xy$

15. [ ] Simplify the expression $5g + 5 - 2g + g + 5h$.

A. $5h - 4g + 5$
B. $5h + 4g + 5$
C. $5h + 4g - 5$
D. $-5h + 4g + 5$

16. [ ] Simplify: $5x + 5(2x + 2) + 7$

A. $10x + 9$
B. $12x + 14$
C. $15x + 17$
D. $5x + 14$

17. [ ] Combine like terms and simplify $4r - 6 - 2r + 5$.

A. $2r - 1$
B. $10r + 5$
C. $10r - 3$
D. $2r + 1$

18. [ ] Factor: $8x + 12$

A. $8(x + 12)$
B. $4(2x + 3)$
C. $\frac{1}{2}(x + 24)$
D. $2(8x + 6)$

19. [ ] One scuba diver descended 15 meters below the surface of a lake. Another diver descended 8 meters below the surface. At the same time, a seagull was flying 2 meters above the lake's surface, and another seagull was flying 10 meters above the surface. Which situation has the greatest absolute value in relation to the surface of the lake?

[Hint: The surface of the lake is 0 feet.]

A. The scuba diver that is 15 meters below the lake's surface
B. The scuba diver that is 8 meters below the lake's surface
C. The seagull that is 2 meters above the lake's surface
D. The seagull that is 10 meters above the lake's surface

20. [ ] Simplify $4(4x - 3y + 6)$

A. $12x - 12y + 24$
B. $16x - 12y + 24$
C. $-16x - 12y + 24$
D. $16x - 12y - 24$

21. ☐ Which set of numbers is included in the solution set of $3(-2x + 3) > 12$?

A. $\left\{-\frac{1}{2}, 2, 6.5\right\}$

B. $\left\{-6.5, -2, -\frac{1}{2}\right\}$

C. $\{1, 2, 6.5\}$

D. $\{-6.5, -2, -1\}$

22. ☐ Jon attended a company meeting in Orlando, FL.

- Jon spent a total of $450 for the company meeting.
- His hotel expense was $256.20.
- He spent $48.45 a day for meals.

For how many days did Jon attend the company meeting?

A. 7
B. 5
C. 3
D. 4

23. ☐ City Car Park offers parking for people who are enjoying a day in Manhattan. The charge is $5.50 for the first hour and $4 for each additional hour, h. Using the inequality $\$5.50 + \$4h < \$50$, determine the maximum number of whole hours Janelle can park there if she wants to spend less than $50 for parking,

A. 10
B. 11
C. 12
D. 13

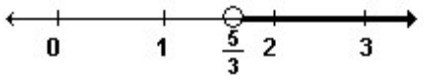
24. ☐ Cam wrote four statements using absolute value. Which of Cam's statements is *incorrect*?

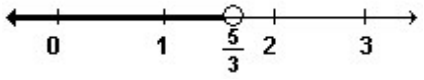
A. $|8| = -8$
B. $|5| = 5$
C. $|-3| = 3$
D. $-|7| = -7$

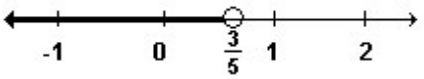
25. ☐ Solve for x: $4 - \frac{1}{2}(x + 5) = 16$

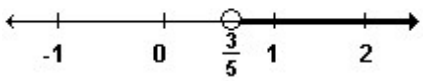
A. −19
B. −14
C. −29
D. 19

26. ☐ Which of the following graphs represents the solution set for the inequality $3x - 5 < 0$?

A. 

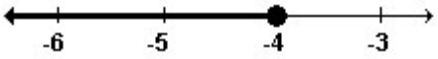
B. 

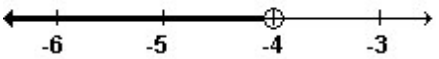
C. 

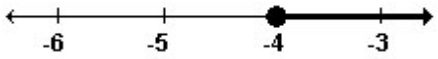
D. 

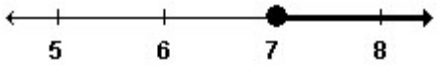
27. ☐ Which graph represents the solution set of the following inequality?

$$-3(x + 2) \geq 6$$

A. 

B. 

C. 

D. 

28. ☐ Solve for x: $3(x - 2) = -9$

A. 1
B. −1
C. $-\frac{7}{3}$
D. $\frac{3}{7}$

29. [ ] Solve for x: $\frac{x}{7} - 5 = -4$

A. 7
B. −7
C. 63
D. −63

30. [ ] Find x in the inequality: $\frac{x}{-6} + 2 \leq 15$

A. $x \leq -78$
B. $x \geq -78$
C. $x \leq 78$
D. $x \geq 78$

Answer Key for Thanksgiving Packet

1. A	11. B	21. D
2. B	12. A	22. D
3. D	13. C	23. C
4. B	14. D	24. A
5. A	15. B	25. C
6. D	16. C	26. B
7. D	17. A	27. A
8. D	18. B	28. B
9. A	19. A	29. A
10. B	20. B	30. B