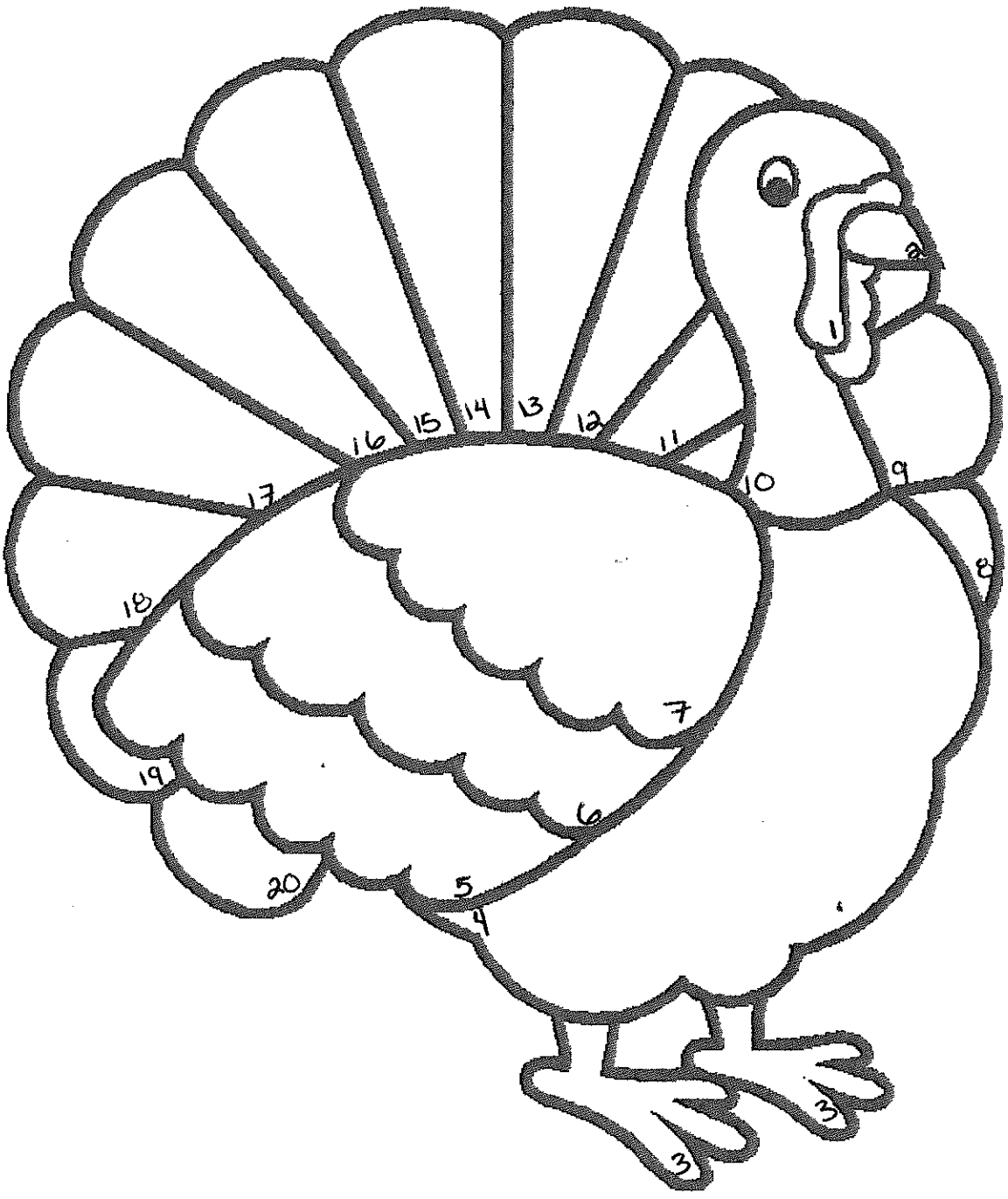
HAPPY HOLIDAYS!



Chapter 3 Color by Number - Turkey

Name: _____ Date: _____ Period: ____

Solve each equation/inequality according to what we learned in class. If it's a graph match it with either the equation/inequality or the solution to a compound inequality.

1. $-10 \leq 4x - 2 < 6$

2. $|y| = 8$

3. $5 - 6|x + 2| \geq -19$

4. $-6|x - 3| - 7 = -31$

5. $-7 \leq \frac{-(3x-8+2x)}{-6} < 4$

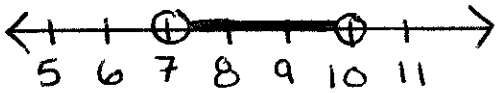
6. $|y + 2| - 8 = -4$

7. $\frac{-2|y+6|-2}{-7} = 4$

8. Write an absolute value inequality whose solutions include -2 to 6.

9. $|x + 6| < 8$

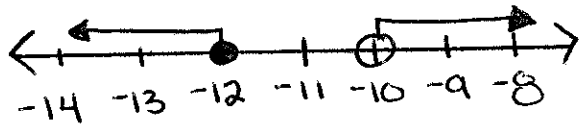
10. $-4|x + 1| - 7 = 21$

11. 

12. $\frac{5x+3}{4} - 4 > 3$ or $\frac{5-2x}{5} > 3$

13. Write an absolute value equation whose solutions are -4 and 2.

14. $|x - 9| = 13$

15. 

16. $|y - 8| + 7 > 35$

17. $|x + 11| = 4$

18. Puddings produced at a factory must be 25g in weight with a tolerance of 5g. Puddings that are not within the tolerated weights must be thrown away. Write an inequality that can be used to assess which puddings are tolerable?

19. $-5|y + 6| \geq -35$

20. Water is not a liquid if its temperature is above 100 degrees Celsius or below 0 degrees Celsius. Write a compound inequality of when water is not a liquid.

Match your work to one of these solutions. It will tell you what color to use for that number on your picture.

$-14 < x < 2$ **Orange**

No Solution **Tan**

$-6 \leq x \leq 2$ **Dark Orange**

$x < 0$ or $x > 100$ **Red**

$y = 8$ and -8 **Dark Yellow**

$x = -1$ and 7 **Dark Brown**

$x > 5$ or $x < -5$ **Green**

$-13 \leq y \leq 1$ **Blue**

$|x - 20| \leq 5$ **Green**

$-2 \leq x < 2$ **Dark Red**

$y = -6$ and 2 **Dark Brown**

$x = -15$ and -7 **Orange**

$y < -20$ or $y > 36$ **Yellow**

$|x - 2| \leq 4$ **Red**

$x = -4$ and 22 **Orange**

$-6\frac{4}{5} \leq x < 6\frac{2}{5}$ **Light Brown**

$y \leq -12$ or $y > -10$ **Red**

$|x + 1| = 3$ **Yellow**

$y = -19$ and 7 **Light Brown**

$7 < x < 10$ **Blue**

Color the words "Happy Holidays" anyway you want.