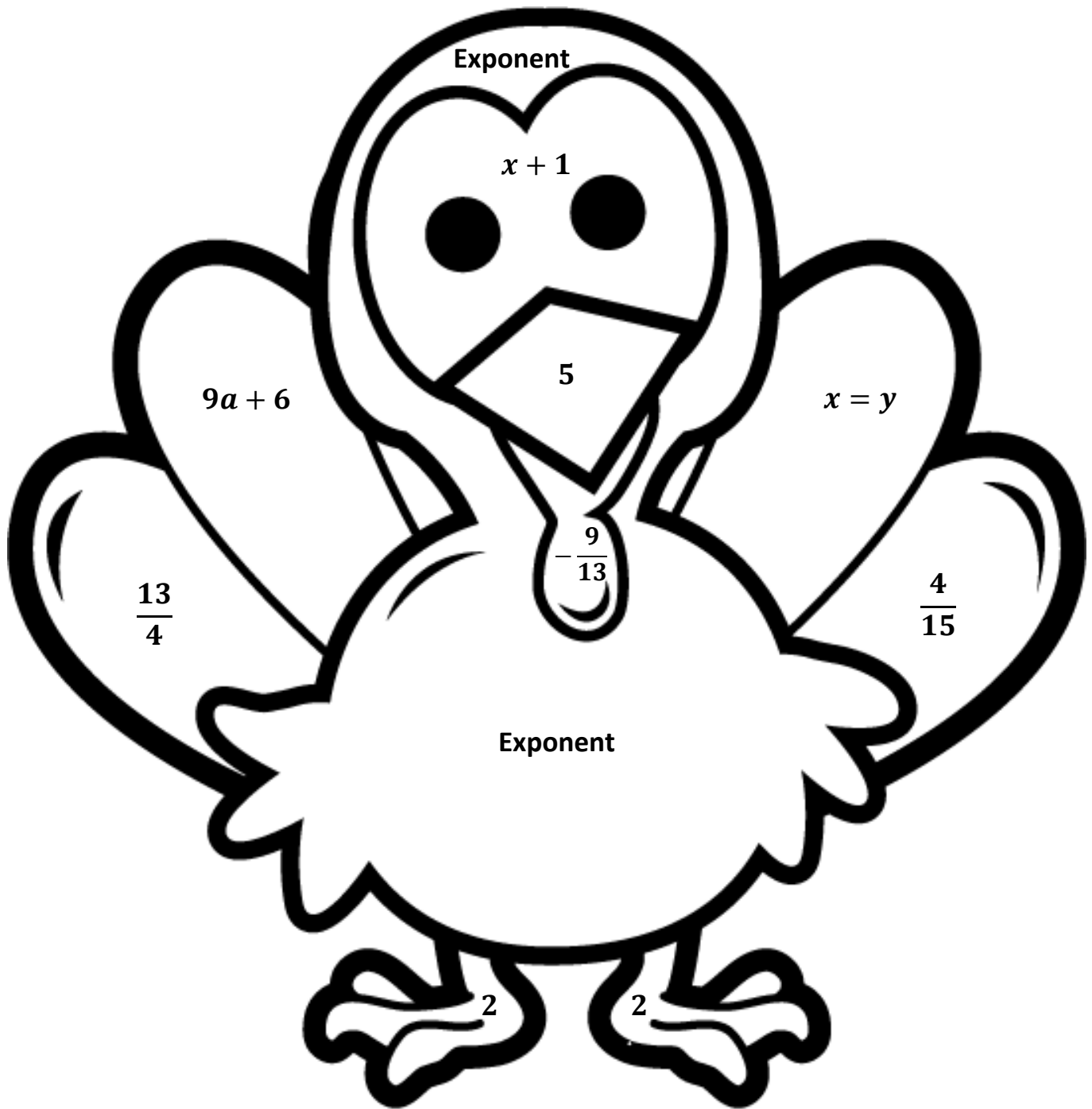


Name: _____ Period: _____ Date: _____

Thanksgiving Color Match Activity SOLVING EXPONENTIAL EQUATIONS



Directions: Answer the questions. Find your answer on the Thanks-Giving Turkey. Then color according to your answers.

1. An exponential equation is an equation in which the variable is in the _____. **(PINK)**

2. In 3^{x+1} , the exponent is _____. **(YELLOW)**

3. In 125^{x+3} , the base is _____. **(ORANGE)**

4. By the definition of exponents, if $a^x = a^y$ then _____. **(RED)**

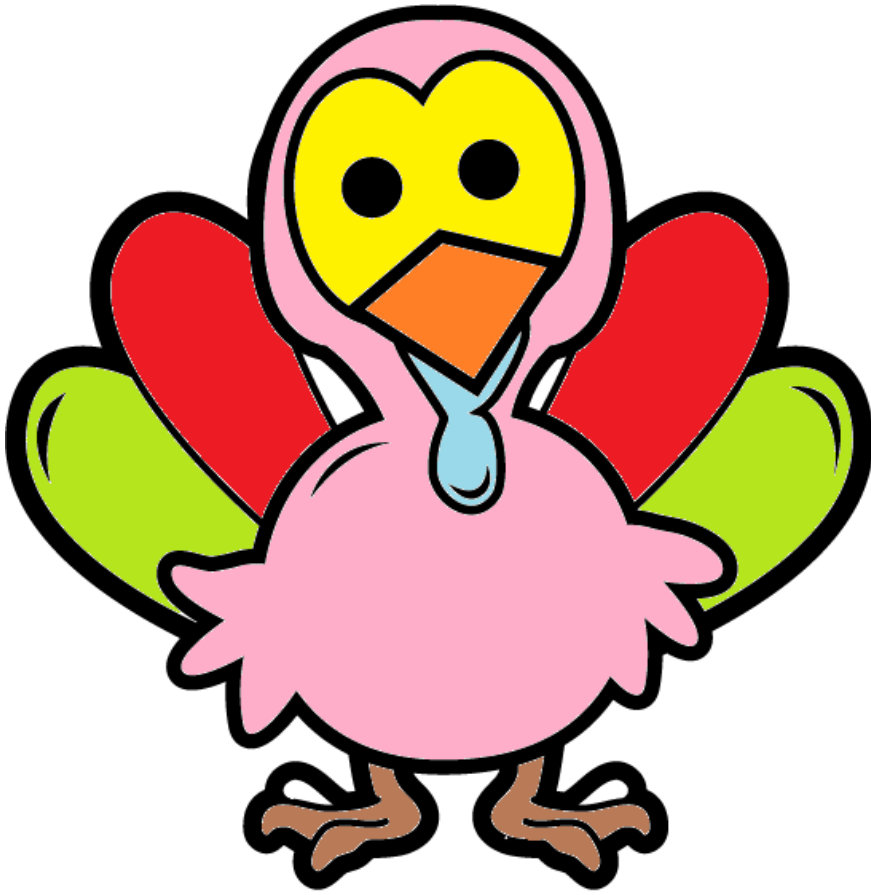
5. The solution of $9^{2x-5} = 27$ is _____. **(LIGHT GREEN)**

6. In 8^{3a+2} , the exponent is _____. **(RED)**

7. In $\frac{1}{2^{3y-1}}$, the base is _____. **(BROWN)**

8. The solution of $4^{5-9x} = \frac{1}{8^{x-2}}$ is _____. **(LIGHT GREEN)**

9. The solution of $9^{2x+3} = \left(\frac{1}{27}\right)^{3x+1}$ is _____. **(LIGHT BLUE)**



Answers:

1. Exponent
2. $x + 1$
3. 5
4. $x = y$
5. $\frac{13}{4}$
6. $9a + 6$
7. 2
8. $\frac{4}{15}$
9. $-\frac{9}{13}$