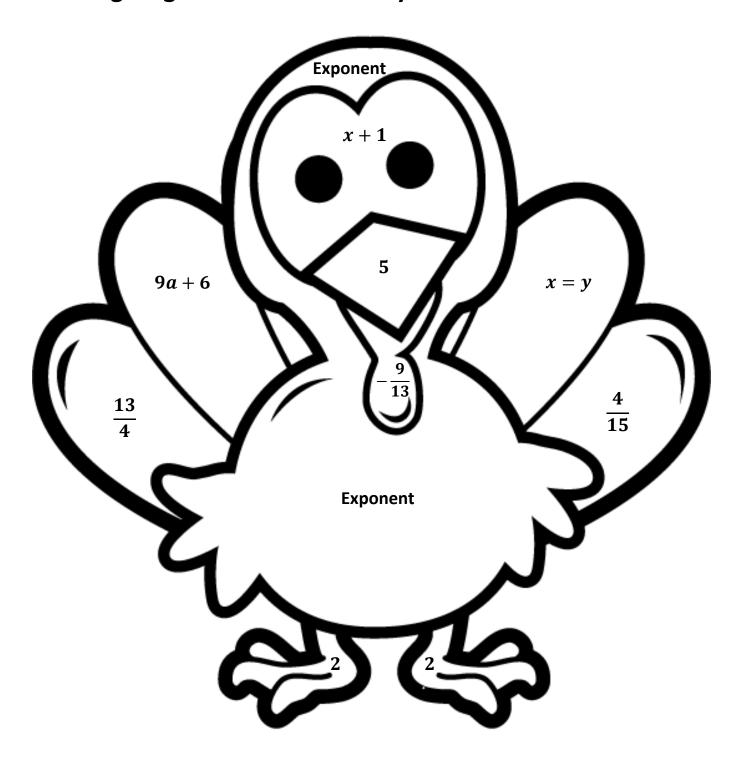
Name: \_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

## 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.**  $\ln \frac{1}{2^{3y-1}}$ , 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**)