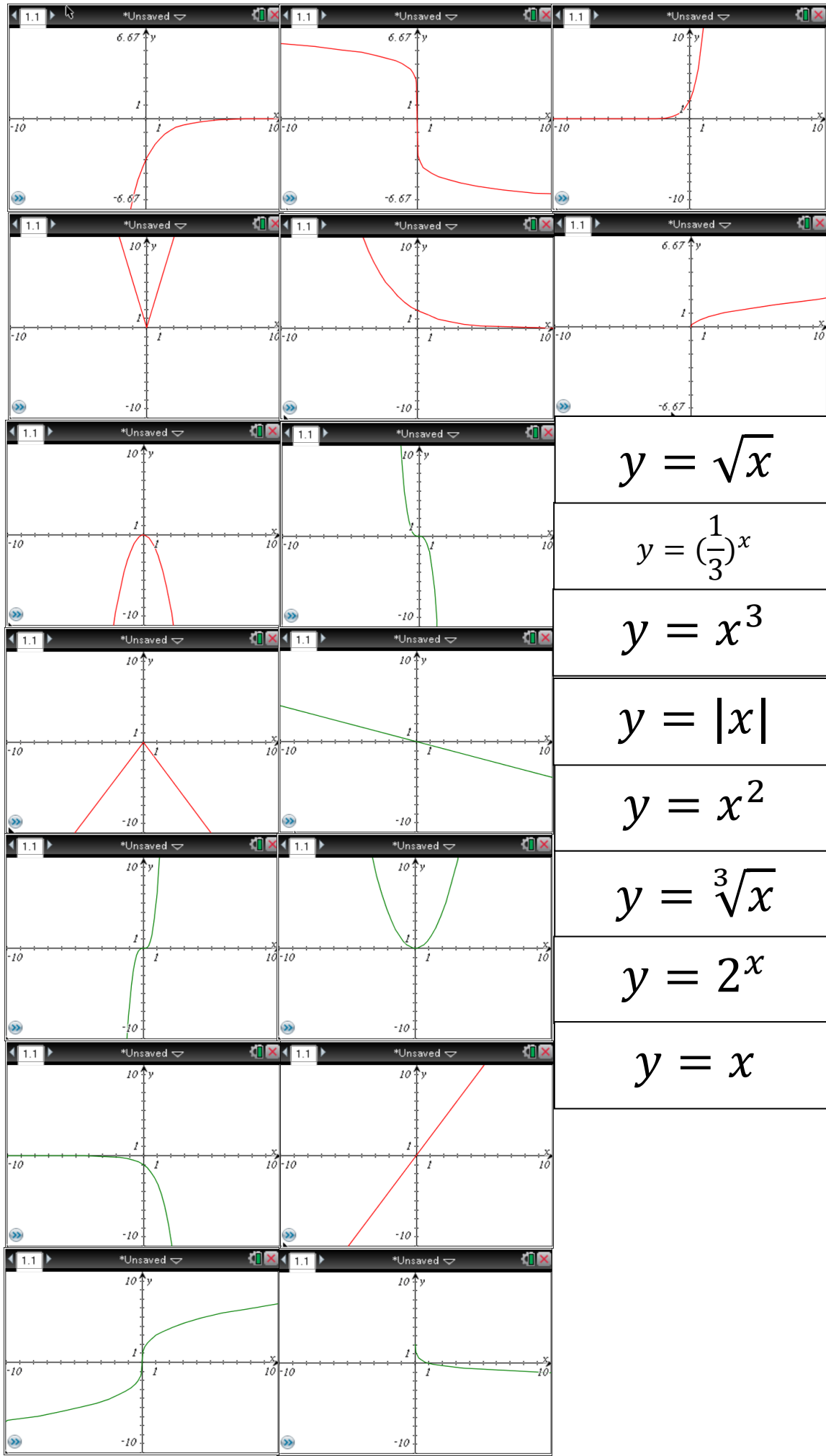


Name: \_\_\_\_\_ Hour: \_\_\_\_\_ Date: \_\_\_\_\_

## Parent Functions and the Graphs Matching Activity

|                              | <u>Linear Functions</u> | <u>Polynomial (QUADRATIC) Functions</u> | <u>Radical (SQUARE ROOT) Functions</u> | <u>Absolute Value Functions</u> |
|------------------------------|-------------------------|-----------------------------------------|----------------------------------------|---------------------------------|
| Equation of Parent Function: |                         |                                         |                                        |                                 |
| Graph 1:                     |                         |                                         |                                        |                                 |
| Graph 2:                     |                         |                                         |                                        |                                 |
| Real World Example:          |                         |                                         |                                        |                                 |

|                                 | <u>Polynomial (CUBIC)<br/>Functions</u> | <u>Radical (CUBIC ROOT)<br/>Functions</u> | <u>Exponential Growth</u> | <u>Exponential Decay</u> |
|---------------------------------|-----------------------------------------|-------------------------------------------|---------------------------|--------------------------|
| Equation of Parent<br>Function: |                                         |                                           |                           |                          |
| Graph 1:                        |                                         |                                           |                           |                          |
| Graph 2:                        |                                         |                                           |                           |                          |
| Real World Example:             |                                         |                                           |                           |                          |



$$y = \sqrt{x}$$

$$y = \left(\frac{1}{3}\right)x$$

$$y = x^3$$

$$y = |x|$$

$$y = x^2$$

$$y = \sqrt[3]{x}$$

$$y = 2^x$$

$$y = x$$

Jasmine's mother tells her she can travel 3 miles from her house in either direction; East or West.

Coach Cowell kicks a soccer ball in the air during gym class. He has the students measure the height of the ball from start to finish at 5 different times during the flight.

Jon currently has \$45 in his wallet. He earns 2 dollars for every newspaper he sells on his route.

Tessa deposited \$30 in a savings account earning 5% interest, compounded annually.

Bob bought a new truck for \$30,000. The value of his truck will depreciate by approximately 13% each year.