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| This activity investigates some transformations of functions. The graph of a function *y* = *f*(*x*) will be *translated* and *dilated*. You will be able to compare the new graph with the original to determine the impact of changes to the function on the graph. |  |

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| **From the home screen, choose 2: My Documents.**  **Choose your class period folder.**  **Open the TI-Nspire document *Transformations\_of\_Functions - Sub.tns.*** |
| **Move to page 1.2.** Press ctrl then right click on the touchpad. |
| **Part One: *.***  1. Click the arrows to change the value of *k.*  a. What happens to the graph of as the value of *k* changes?  b. **Move to pages 1.3 – 1.7**. Answer the questions on page 1.3 – page 1.7. (To move back to page 1.2, press ctrl then left click on the touchpad.)  c. Press ctrl then up on the touchpad. A green check means you answered the question correctly. A red x means you answered the question incorrectly.  d. Press ctrl then down on the touchpad to return to the document. Correct any questions you answered incorrectly. | |
| **Move to page 2.1.** | |
| **Part Two: .**  2. Click the arrows to change the value of *a*.  a. What happens to the graph of as the value of *a* changes?  b. **Move to pages 2.2 – 2.6**. Answer the questions on page 2.2 – 2.6. (To move back to page 2.1, press ctrl then left click on the touchpad.)  c. Press ctrl then up on the touchpad. A green check means you answered the question correctly. A red x means you answered the question incorrectly.  d. Press ctrl then down on the touchpad to return to the document. Correct any questions you answered incorrectly. | |
| **Move to page 3.1.** | |
| **Part Three: .**  3. Click the arrows to change the value of *h*.  a. What happens to the graph of as the value of *h* changes?  b. **Move to pages 3.2 – 3.6**. Answer the questions on page 3.2 – 3.6. (To move back to page 3.1, press ctrl then left click on the touchpad.)  c. Press ctrl then up on the touchpad. A green check means you answered the question correctly. A red x means you answered the question incorrectly.  d. Press ctrl then down on the touchpad to return to the document. Correct any questions you answered incorrectly. | |
| **Move to page 4.1.** | |
| **Part Four***:*  4. Click the arrows to change the value of *b*.  a. What happens to the graph of as the value of *b* changes?  b. **Move to pages 4.2 – 4.6**. Answer the questions on page 4.2 – 4.6. (To move back to page 4.1, press ctrl then left click on the touchpad.)  c. Press ctrl then up on the touchpad. A green check means you answered the question correctly. A red x means you answered the question incorrectly.  d. Press ctrl then down on the touchpad to return to the document. Correct any questions you answered incorrectly. | |
| **Close the document.** Press ctrl w. Choose Yes. | |