

Math 3 Advanced

Determine the graphical transformations for an exponential function from its mother function.

$$1. \quad y = -2 \cdot \left(\frac{1}{2}\right)^{x-2} - 1$$

$$2. \quad y = 5 \cdot 2^{x+2} + 2$$

$$3. \quad y = 3 \cdot \left(\frac{1}{2}\right)^{x-2} + 1$$

$$4. \quad y = -3 \cdot 2^{x-1} + 2$$

$$5. \quad y = -2 \cdot 2^{x-2} + 2$$

$$6. \quad y = -4 \cdot 2^{x+1} + 1$$

$$7. \quad y = \frac{1}{2} \cdot 5^{x-2} - 2$$

$$8. \quad y = 2 \cdot \left(\frac{1}{3}\right)^{x-1} - 1$$

$$9. \quad y = 4 \cdot 2^{x-2} - 1$$

$$10. \quad y = -\frac{1}{3} \cdot \left(\frac{1}{6}\right)^{x-1} + 2$$

$$11. \quad y = \frac{1}{2} \cdot \left(\frac{1}{5}\right)^{x-2} + 1$$

$$12. \quad y = \frac{1}{3} \cdot \left(\frac{1}{6}\right)^{x-1} + 1$$

$$13. \quad y = -2 \cdot 3^{x+1} - 1$$

$$14. \quad y = -\frac{1}{3} \cdot 4^{x+2} + 2$$

$$15. \quad y = 4 \cdot 2^{x-2} + 2$$

$$16. \quad y = -\frac{1}{2} \cdot 6^{x+2} + 2$$