3. e<sup>8</sup>

5.  $\frac{1}{2e}$ 

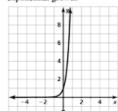
7. 625e<sup>28x</sup>

9. 3e3x

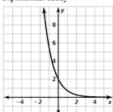
11.  $e^{-5x+8}$ 

13. The 4 was not squared;  $(4e^{3x})^2 = 4^2e^{(3x)(2)} = 16e^{6x}$ 

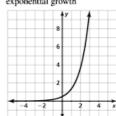
15. exponential growth



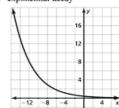
17. exponential decay



19. exponential growth



21. exponential decay



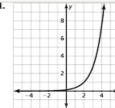
23. D; The graph shows growth and has a y-intercept of 1.

25. B; The graph shows decay and has a y-intercept of 4.

**27.**  $y = (1 - 0.221)^{\circ}; 22.1\%$  decay

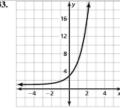
**29.**  $y = 2(1 + 0.492)^t$ ; 49.2% growth

31.



domain: all real numbers, range: y > 0

33.



domain: all real numbers, range: y > 1