

Answers to Algebra 2 L1.2 Transformations (Stretches & Shrinks) pg 17 #17-32, 34

17.  $g(x) = 5x + 10$

18.  $g(x) = x + 3$

19.  $g(x) = |4x| + 4$

20.  $g(x) = \left| \frac{1}{4}x + 3 \right|$

21.  $g(x) = -|x - 4| + 1$

22.  $g(x) = 6 - 3x$

23. C; The graph has been translated left.

24. A; The graph has been stretched vertically.

25. D; The graph has been translated up.

26. B; The graph has been shrunk horizontally.

27.  $g(x) = 2x + 1$

28.  $g(x) = \frac{1}{3}x - 1$

29.  $g(x) = \left| \frac{1}{2}x - 2 \right|$

30.  $g(x) = |x - 3|$

31.  $g(x) = -|x| - 8$

32.  $g(x) = |x - 1| - 3$

34. A vertical stretch is given by  $y = a \cdot f(x)$ , not  $y = f(ax)$ ;  
 $g(x) = 5(x - 6)$  or  $g(x) = 5x - 30$