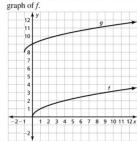
L5.3a Transforms of Radical Functions

Pg 256, #19-28, 41-50

19. The graph of g is a translation 1 unit left and 8 units up of the graph of f



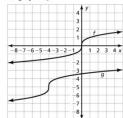
20. The graph of *g* is a vertical stretch by a factor of 2 followed by a translation 1 unit right of the graph of *f*.



21. The graph of g is a reflection in the x-axis followed by a translation 1 unit down of the graph of f.



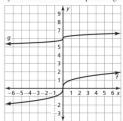
22. The graph of *g* is a translation 4 units left and 5 units down of the graph of *f*.



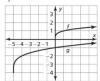
23. The graph of g is a vertical shrink by a factor of $\frac{1}{4}$ followed by a reflection in the y-axis of the graph of f.



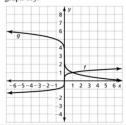
24. The graph of g is a vertical shrink by a factor of $\frac{1}{3}$ followed by a translation 6 units up of the graph of f.



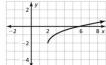
25. The graph of *g* is a vertical stretch by a factor of 2 followed by a translation 5 units left and 4 units down of the graph of *f*.



26. The graph of g is a horizontal shrink by a factor of $\frac{1}{32}$ followed by a reflection in the y-axis and a translation 3 units up of the graph of f.



27. The graph was translated 2 units left but it should be translated 2 units right.



28. The function is a horizontal stretch by a factor of 2, not a horizontal shrink by a factor of $\frac{1}{2}$; The graph of g is a horizontal stretch by a factor of 2 and a translation 3 units up of the parent square root function.

41.
$$g(x) = 2\sqrt{x} + 8$$

42.
$$g(x) = 2\sqrt[3]{-x-2}$$

43.
$$g(x) = \sqrt{9x + 36}$$

44.
$$g(x) = \frac{1}{2}\sqrt[4]{x-5} - \frac{1}{2}$$

45.
$$g(x) = 2\sqrt{x+1}$$

46. $g(x) = -\sqrt[3]{x-2}$

47.
$$g(x) = 2\sqrt{x+3}$$

48.
$$g(x) = -\frac{1}{3}\sqrt{x-1} + 9$$

49.
$$g(x) = 2\sqrt{(x+5)^2 - 2}$$

50.
$$g(x) = \frac{1}{4}\sqrt[3]{x^2 - 10x} + 6$$