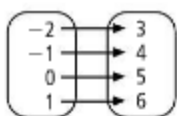2.6 key 11-29, skip 22

11. domain: $\{-2, -1, 0, 1\}$, range: $\{3, 4, 5, 6\}$

function

12. yes   **13.** 9

14. $\{-2, -1, 0, 1, 2\}$ **15.** $f(x) = 2x + 7$

16. Answers may vary. Sample: Both methods can be used to determine whether there is more than one output for any given input. A mapping diagram does not represent a function if any domain value is mapped to more than one range value. A graph does not represent a function if it fails the vertical line test.

17. No; there exists a vertical line that intersects the graph in more than one point, so the graph does not represent a function.

18. not a function

19. function; domain: $\{-4, -1, 0, 3\}$, range: $\{-4\}$

20. Check students' work.

21. 5; if $f(a) = 26$, then $6a - 4 = 26$ and $a = 5$.

23. **a.** c is the independent variable and p is the dependent variable.

    b. Yes; for each value of c, there is a unique value of p.

    c. $p = 5c - 34$

    d. $0 \le c \le 40$, $0 \le p \le 166$

24. Answers may vary. Sample given: any value except 1 and -7

25. function   **26.** not a function

27. not a function   **28.** function

29. A horizontal line is a function because each value of x has a unique value of y; a vertical line is not a function because the x-value has more than one y-value associated with it.