

*Written Exercises, pages 466–467* 1. a.  $\frac{5}{2}$

35.

b.  $-4$  c.  $-\frac{3}{2}$  d.  $\frac{x-3}{2}$  3. a.  $\frac{3}{2}$  b. 1

c. not real d.  $\frac{\sqrt{x}}{2}$  5. a. 3 b. not real

c.  $\sqrt{x-3}$  d.  $\sqrt[4]{x}$  7. no 9. no

9/5

p. 145 # 36-40 even

$$\textcircled{36} \begin{aligned} f(g(-1)) &= 8 \\ g(f(-1)) &= 1 \end{aligned}$$

$$\textcircled{38} \begin{aligned} f(g(-2)) &= 24 \\ g(f(-2)) &= -5 \end{aligned}$$

$$\textcircled{40} \begin{aligned} g(g(2)) &= 7 \\ g(2g(1)) &= 5 \end{aligned}$$

#41-46 all

$$\textcircled{41} \frac{127}{64} \quad \textcircled{42} \frac{-10}{7} \quad \textcircled{43} 3 \quad \textcircled{44} -2a-1$$

$$\textcircled{45} -2x-h \quad \textcircled{46} 3$$

#47-52

$$\textcircled{47} \{x \mid x \leq \frac{3}{5}\} \quad \textcircled{48} \{\mathbb{R}\} \quad \textcircled{49} \{x \mid x \neq 7\}$$

$$\textcircled{50} \{x \mid x \neq 0 \text{ and } x \neq -5\} \quad \textcircled{51} \{\mathbb{R}\}$$

$$\textcircled{52} \{x \mid x \neq -3 \text{ and } x \neq -4\}$$