

**Answers:**

1. a. 4  
b. 4  
c. 4

2. a. 2  
b. 2  
c. 2

3. a. 2  
b. 1  
c. DNE b/c limit of  $f(x)$  from the left of 3 does not equal the limit of  $f(x)$  from the right of 3.  
*or*

DNE b/c  $\lim_{x \rightarrow 3^-} f(x) \neq \lim_{x \rightarrow 3^+} f(x)$

4. a. 1  
b. 4  
c. DNE b/c limit of  $f(x)$  from the left of 2 does not equal the limit of  $f(x)$  from the right of 2.  
*or*

DNE b/c  $\lim_{x \rightarrow 2^-} f(x) \neq \lim_{x \rightarrow 2^+} f(x)$

5. a. 2  
b. 2  
c. 2

6. a. 2  
b. 2  
c. 2

7.  $\frac{1}{4}$

8.  $-\frac{1}{4}$