1. Use the information provided in the table to determine the characteristic(s) of the graph in each interval

2. Sketch the graph of f(x) as accurately as possible based on the given data and the characteristics you determined.

Table 2

	$f(x)$	$f'(x)$	$f''(x)$	Characteristic
$-\infty < x < 0$		+	−	
$x = 0$	-2	0	−	
$0 < x < 2$		−	−	
$x = 2$	Undef.	Undef.	Undef.	
$2 < x < 4$		−	+	
$x = 4$	6	0	+	
$4 < x < \infty$		+	+	

Characteristics:

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Table 3

	$f(x)$	$f'(x)$	$f''(x)$	Characteristic
$-\infty < x < 0$		+	−	
$x = 0$	0	0	Undef.	
$0 < x < 1$		−	−	
$x = 1$	-3	−	0	
$1 < x < 8$		−	+	
$x = 8$	-16	0	+	
$8 < x < \infty$		+	+	

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Table 4

	$f(x)$	$f'(x)$	$f''(x)$	Characteristic
$-\infty < x < 1$		−	+	
$x = 1$	-27	0	+	
$1 < x < 2$		+	+	
$x = 2$	-16	+	0	
$2 < x < 4$		+	−	
$x = 4$	0	0	0	
$4 < x < \infty$		+	+	

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