

**Source:**

#source openstax calculus volume 1 section 2.4 exercises

**1 | 131**

$$x \leq 0 \implies \boxed{\text{infinite}}$$

**2 | 132****no discontinuities****3 | 140**

$$\boxed{\text{Infinite discontinuity}} \frac{-1}{0}$$

**4 | 141**

$$\boxed{\text{Continuous}} \left( \frac{\cancel{(2u-1)}(3u+2)}{\cancel{2u-1}} \right)$$

**5 | 145**

$$3x + 2 = 2x - 3 \implies \boxed{x = -5}$$

**6 | 150****The function is not continuous at  $x = 2$** **7 | 152****7.1 | a**

$$\cos t = t^3$$

**7.2 | b**

$$\implies (\cos t)^{\frac{1}{3}}$$