

### Math 232 Worksheet 3 - Arc Length

1. Find the exact length of the curve.

(a)  $y = \frac{2}{3}x^{\frac{3}{2}}, 0 \leq x \leq 3$

(b)  $y = \frac{1}{3}x^{\frac{3}{2}} - x^{\frac{1}{2}}, 1 \leq x \leq 4$

**Answer keys**

**1(a).**  $14/3$

**1(b).**  $10/3$