(a) Multiply out the brackets and simplify:

$$x^{\frac{1}{2}}\left(x^{-\frac{3}{2}} + x^{-\frac{1}{2}} \right).$$

2

(b) Find the exact value of this expression when $x = 6$.

1

Answers:

(a) $x^{-1} + 1$ or equivalent

(b) $1\frac{1}{6}$ or $\frac{7}{6}$