2345 a) $y = 6\sqrt{x}$

$= 6x^{\frac{1}{2}}$

$y' = 6 \times \frac{1}{2} \times x^{-\frac{1}{2}}$

$= 3 \cdot x^{-\frac{1}{2}}$

$= \frac{3}{\sqrt{x}}$

b) $y' = x^4 - 4\sqrt{x}$

$y = x^4 - 4x^{\frac{1}{2}}$

$= 4x^3 - 4 \cdot \frac{1}{2} x^{-\frac{1}{2}}$

$= 4x^3 - \frac{2}{\sqrt{x}}$

c) $y = x^6 + x^{\frac{3}{4}}$

$= 6x^5 + \frac{3}{4} x^{\frac{3}{4} - \frac{4}{4}}$

$= 6x^5 + \frac{3}{4} x^{-\frac{1}{4}}$

$= 6x^5 + \frac{3}{4\sqrt{x^4}}$

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d) $y = \frac{3}{4} x^{\frac{4}{3}}$

$y' = \frac{4}{3} \times \frac{3}{4} x^{\frac{4}{3} - \frac{3}{3}}$

$= x^{\frac{1}{3}}$

$= \sqrt[3]{x^1}$ ok