

$$\textcircled{54} \quad 3X^{\frac{1}{2}} + 4X^{\frac{1}{2}} + X^{\frac{3}{2}} = X^{\frac{1}{2}}(3 + 4X^{\frac{1}{2} + \frac{1}{2}} + X^{\frac{3}{2} + \frac{1}{2}}) = X^{\frac{1}{2}}(X^2 + 4X + 3)$$
$$= \boxed{X^{\frac{1}{2}}(X+1)(X+3)}$$

$$\textcircled{72} \quad 8X^2 + 10X + 3 = \boxed{(4X + 3)(2X + 1)}$$

- ~~(8X + 3)(X + 1)~~
- ~~(X + 3)(8X + 1)~~
- (4X + 3)(2X + 1)
- ~~(2X + 3)(4X + 1)~~