

SIMPLIFY THE FOLLOWING EXPRESSIONS. (FACTOR YOUR ANSWERS WHENEVER POSSIBLE, AND WRITE YOUR ANSWERS WITHOUT NEGATIVE EXPONENTS.)

$$\textcircled{1} \frac{(x-1) \cdot 2x - x^2}{(x-1)^2}$$

$$\textcircled{12} \frac{\sqrt{2(x+h)-1} - \sqrt{2x-1}}{h}$$

$$\textcircled{2} x^2 \cdot 4(x-2)^3 + 2x(x-2)^4$$

$$\textcircled{13} \frac{\frac{1}{4(x+h)+9} - \frac{1}{4x+9}}{h}$$

$$\textcircled{3} \frac{5}{3} x^{2/3} - \frac{10}{3} x^{-1/3}$$

$$\textcircled{14} \frac{\sqrt{\tau^2+4} - \sqrt{x^2+4}}{\tau-x}$$

$$\textcircled{4} x \cdot \frac{1}{2} (2x+3)^{-1/2} \cdot 2 + \sqrt{2x+3}$$

$$\textcircled{15} \frac{\frac{1}{\tau^2} - \frac{1}{4}}{\tau^3 - 8}$$

$$\textcircled{5} \tau^2 \cdot \frac{1}{2} (\tau-2)^{-1/2} + 2\tau\sqrt{\tau-2}$$

$$\textcircled{16} \frac{\frac{1}{\sqrt{x+h}} - \frac{1}{\sqrt{x}}}{h}$$

$$\textcircled{6} \sqrt{x} \cdot 2(x-2) + \frac{1}{2} x^{-1/2} (x-2)^2$$

$$\textcircled{7} \frac{\sqrt{25+x^2} - x \cdot \frac{1}{2} (25+x^2)^{-1/2} \cdot 2x}{25+x^2}$$

$$\textcircled{8} \frac{(x^2+3)^2 \cdot 6 - 6x \cdot 2(x^2+3) \cdot 2x}{(x^2+3)^4}$$

$$\textcircled{9} \frac{x \cdot \frac{1}{2} (x^2+1)^{-1/2} \cdot 2x - \sqrt{x^2+1}}{x^2}$$

$$\textcircled{10} x \cdot \frac{1}{3} (x^2+5)^{-2/3} \cdot 2x + (x^2+5)^{1/3}$$

$$\textcircled{11} \frac{(x^2+1)^2 (-2x) - (1-x^2) \cdot 2(x^2+1) \cdot 2x}{(x^2+1)^4}$$