1. What is the derivative of $f(x) = x^3 + 7x^2 - 8x + 6$?

A) $3x^2 + 14x - 8$

B) $2x^2 + 14x - 8$

C) $3x^2 + 7x - 8$

D) $4x^2 + 14x - 8$

2. What is the derivative of $\sqrt{x}$?

A) (1/2)x^(–1/2)

B) (1/2)x^(1/2)

C) (1/2)x

D) (1/2)x^(–2)

3. What is the derivative of d/dx (sin x)?

A) cos x

B) -sin x

C) $\sec^2 x$

D) $-\csc^2 x$

4. What is the formula for the Quotient Rule?

A) $d/dx\ [f/g] = [g \cdot f' - f \cdot g'] / g^2$

B) $d/dx\ [f/g] = [f \cdot g' - g \cdot f'] / f^2$

C) $d/dx\ [f/g] = [f \cdot g + g \cdot f'] / g^2$

D) $d/dx\ [f/g] = [g \cdot f + f \cdot g'] / g^2$

5. What is the derivative of $(2x - 3)^2$ after expanding?

A) 8x - 12

B) 4x - 12

C) 4x + 12

D) 8x + 12