

Evaluate the definite integral of the algebraic function. Use a graphing utility to verify your result.

$$8. \int_2^5 (-3v + 4) dv$$

$$10. \int_1^3 (3x^2 + 5x - 4) dx$$

$$14. \int_{-2}^{-1} \left(u - \frac{1}{u^2} \right) du$$

$$15. \int_1^4 \frac{u-2}{\sqrt{u}} du$$

$$18. \int_1^8 \sqrt{\frac{2}{x}} dx$$

$$20. \int_0^2 (2-t)\sqrt{t} dt$$

$$23. \int_0^3 |2x - 3| dx$$

$$25. \int_0^3 |x^2 - 4| dx$$