

WORKSHEET

Integration of $u/v \, dx$

Unsolved with Answer key



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Integration of $u/v \, dx$

Q 1. Integrate $x/(x^3 + 1) \, dx$

Q 2. Integrate $\ln(x^2)/x \, dx$

Q 3. Integrate $3x/(2 + x^2) \, dx$

Q 4. Integrate $e^x/x^2 \, dx$

Q 5. Integrate $1/(x^3 + 1) \, dx$

Q 6. Integrate $(1 - \cos(x))/\sin(x) \, dx$

Q 7. Integrate $(x + 1)/x^2 \, dx$

Q 8. Integrate $x^2/(x^2 - 1) \, dx$

Answer Key

Integration of $u/v \, dx$

1. $\ln |x^3 + 1|/3 + C$
2. $(\ln(x^2))^2/4 + C$
3. $(3/2) \ln |2 + x^2| + C$
4. $Ei(x) + C$
5. $(1/3) \ln |x^3 + 1| + C$
6. $\ln |\sin(x)| + C$
7. $-1/x + 1 + C$
8. $(1/2) \ln |x^2 - 1| + C$

