Name_____

Calculus Practice: Indefinite Integrals 4b

Evaluate each indefinite integral.

1) $\int -3\csc^2 x \, dx$

2) $\int -4\cos x \, dx$

3) $\int 3\sec^2 x \, dx$

4) $\int 2\sin x \, dx$

5) $\int 2\csc x \cot x \, dx$

6) $\int 2\sec x \tan x \, dx$

7) $\int \dfrac{4}{\csc x} \, dx$

8) $\int \dfrac{3}{\sec x} \, dx$

9) $\int -\dfrac{4\sin x}{\cos^2 x} \, dx$

10) $\int \dfrac{1}{\cos^2 x} \, dx$

11) $\displaystyle\int -\frac{2\cos x}{\sin^2 x}\,dx$

12) $\displaystyle\int \frac{3}{\csc x}\,dx$

13) $\displaystyle\int -2\cot x\,dx$

14) $\displaystyle\int -\csc x\,dx$

15) $\displaystyle\int 4\sec x\,dx$

16) $\displaystyle\int -2\tan x\,dx$

17) $\displaystyle\int -\frac{3}{\sin x}\,dx$

18) $\displaystyle\int -\frac{\sin x}{\cos x}\,dx$

19) $\displaystyle\int \frac{3}{\cos x}\,dx$

20) $\displaystyle\int -\frac{2\cos x}{\sin x}\,dx$

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Calculus Practice: Indefinite Integrals 4b

Evaluate each indefinite integral.

1) $\int -3\csc^2 x \, dx$

$3\cot x + C$

2) $\int -4\cos x \, dx$

$-4\sin x + C$

3) $\int 3\sec^2 x \, dx$

$3\tan x + C$

4) $\int 2\sin x \, dx$

$-2\cos x + C$

5) $\int 2\csc x \cot x \, dx$

$-2\csc x + C$

6) $\int 2\sec x \tan x \, dx$

$2\sec x + C$

7) $\int \frac{4}{\csc x} \, dx$

$-4\cos x + C$

8) $\int \frac{3}{\sec x} \, dx$

$3\sin x + C$

9) $\int -\frac{4\sin x}{\cos^2 x} \, dx$

$-4\sec x + C$

10) $\int \frac{1}{\cos^2 x} \, dx$

$\tan x + C$

11) $\int -\dfrac{2\cos x}{\sin^2 x}\,dx$

$2\csc x + C$

12) $\int \dfrac{3}{\csc x}\,dx$

$-3\cos x + C$

13) $\int -2\cot x\,dx$

$-2\ln\left|\sin x\right| + C$

14) $\int -\csc x\,dx$

$-\ln\left|\csc x - \cot x\right| + C$

15) $\int 4\sec x\,dx$

$4\ln\left|\sec x + \tan x\right| + C$

16) $\int -2\tan x\,dx$

$-2\ln\left|\sec x\right| + C$

17) $\int -\dfrac{3}{\sin x}\,dx$

$-3\ln\left|\csc x - \cot x\right| + C$

18) $\int -\dfrac{\sin x}{\cos x}\,dx$

$-\ln\left|\sec x\right| + C$

19) $\int \dfrac{3}{\cos x}\,dx$

$3\ln\left|\sec x + \tan x\right| + C$

20) $\int -\dfrac{2\cos x}{\sin x}\,dx$

$-2\ln\left|\sin x\right| + C$