เฉลยแบบฝึกหัด 11.5

จงหาค่าการอินทิเกรตต่อไปนี้

1. $\frac{1}{16}e^{x} - \frac{1}{48}\sin^{3}(2e^{x}) - \frac{1}{64}(\sin 4e^{x}) + C$

2. $\frac{-\cos 10x}{20} - \frac{\cos(2x)}{4} + C$

3. $\frac{\sin^{3} x}{3} - \frac{\sin^{5} x}{5} + C$

4. $\frac{\sin^{4} x}{4} - \frac{\sin^{6} x}{6} + C$

5. $-2\cos x + 3\sin x + C$

6. $\tan x + C$

7. $\frac{\sec^{3} x}{3} + C$

8. $\sin(5+e^{x}) - \frac{2}{3}\sin^{3}(5+e^{x}) + \frac{\sin^{5}(5+e^{x})}{5} + C$

9. $x + \operatorname{cosec} x + C$

10. $\frac{x^{3}}{3} + \cos x + C$

11. $-2\cos x - 5e^{x} + C$

12. $\frac{x^{3}}{3} + \tan x + C$

13. $\tan x + \cos x + C$

14. $\sin x + \frac{3^{x}}{\ln 3} + C$

15. $-\frac{\cos 4e^{2x}}{16} - \frac{\cos 2e^{2x}}{8} + C$

16. $\frac{x}{4} - \frac{\sin(4x)}{16} + C$

17. $\sec x - 2\tan x + C$

18. $\sec x + C$

19. $4\ln x + \tan x + C$

20. $\sec x + C$