## State the anti-derivative.

Connect the answer dots in order.

1. $\int_{0}^{\pi / 2} \cos (x) d x$
2. $\int_{0}^{\pi} \sin (x) d x$
3. $-\int_{0}^{2 \pi} \cos (x) d x$
4. $\int_{0}^{4} x^{2} d x$
5. $\int_{-4}^{4} x^{2} d x$
6. $\int_{-4}^{4} 35 x^{7} d x$
7. $-\int_{b}^{0} 4 x^{3} d x$
8. $\int_{a}^{b}(x+4) d x$
9. $\int_{a}^{0} 4 x^{3} d x$
10. $\int_{-1}^{8} \frac{4 \sqrt[3]{x}}{3} d x$
11. $\int_{a}^{b} 4 x d x$
12. $\int_{0}^{1} 10 d x$
13. $\int_{0}^{b}(\sin (x)+\cos (x)) d x$
14. $\frac{b^{2}-a^{2}}{2}+4(b-a)$
$\begin{gathered}-\cos ^{2}(m) \\ \cos (m)^{\bullet} \\ \bullet-\sin ^{2}(m)\end{gathered}{ }^{\frac{x^{2}}{2}} \sin (b)-\cos (b)+1$

$\sin (a)+c \quad 9-6 a^{16 / 3} \quad{ }^{10} \quad-\quad \cos (m)+c$
$-\sin ^{2}(a)-\cos (a)+c^{\circ} a^{4}-b^{4} \quad x^{4}+c^{\circ} \quad 7 / 2 \quad \sin (m)+c$
15. $\int d x$
16. $\int_{1}^{2} 4 x d x$
17. $\int_{3}^{4} x d x$
18. $\int_{0}^{\pi / 2} \sin (x) d x$
19. $\int_{2}^{1} 4 x d x$
20. $\int_{0}^{4} \sqrt{x} d x$
21. $\frac{5}{2} \int_{1}^{4} x \sqrt{x} d x$
22. $\int_{0}^{-9} 2 \sqrt{x} d x$
23. $\int_{-2}^{14} d x$
24. $\int \sin (a) d a$
25. $-\int \cos (a) d a$
26. $-\int \sin (a) d a$
27. $\int \cos (a) d a$
28. $\int_{0}^{x} a d a$
29. $\iint \cos (a) d a d a$, where $c_{1}=0$
30. $\int_{0}^{2} a d x$
31. $\int_{a}^{b} 4 x^{3} d x$
32. $\int_{0}^{-1} 2 \sin (3) d x$
33. $\int_{b}^{2} 4 x^{3} d x$
34. $\int\left(4 x^{3}-6 x^{2}\right) d x$
35. $\int \sin (m) d m$
36. $-\int \cos (m) d m$
37. $-\int \sin (m) d m$
38. $\int \cos (m) d m$
39. $\int 4 x^{3} d x$
40. $\frac{4}{5} \int_{0}^{c}(x-2) d x$
41. $\int_{-3}^{3} \cos (x) d x$
42. $\iint \cos (m) d m d m$, where $c_{1}=0$
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