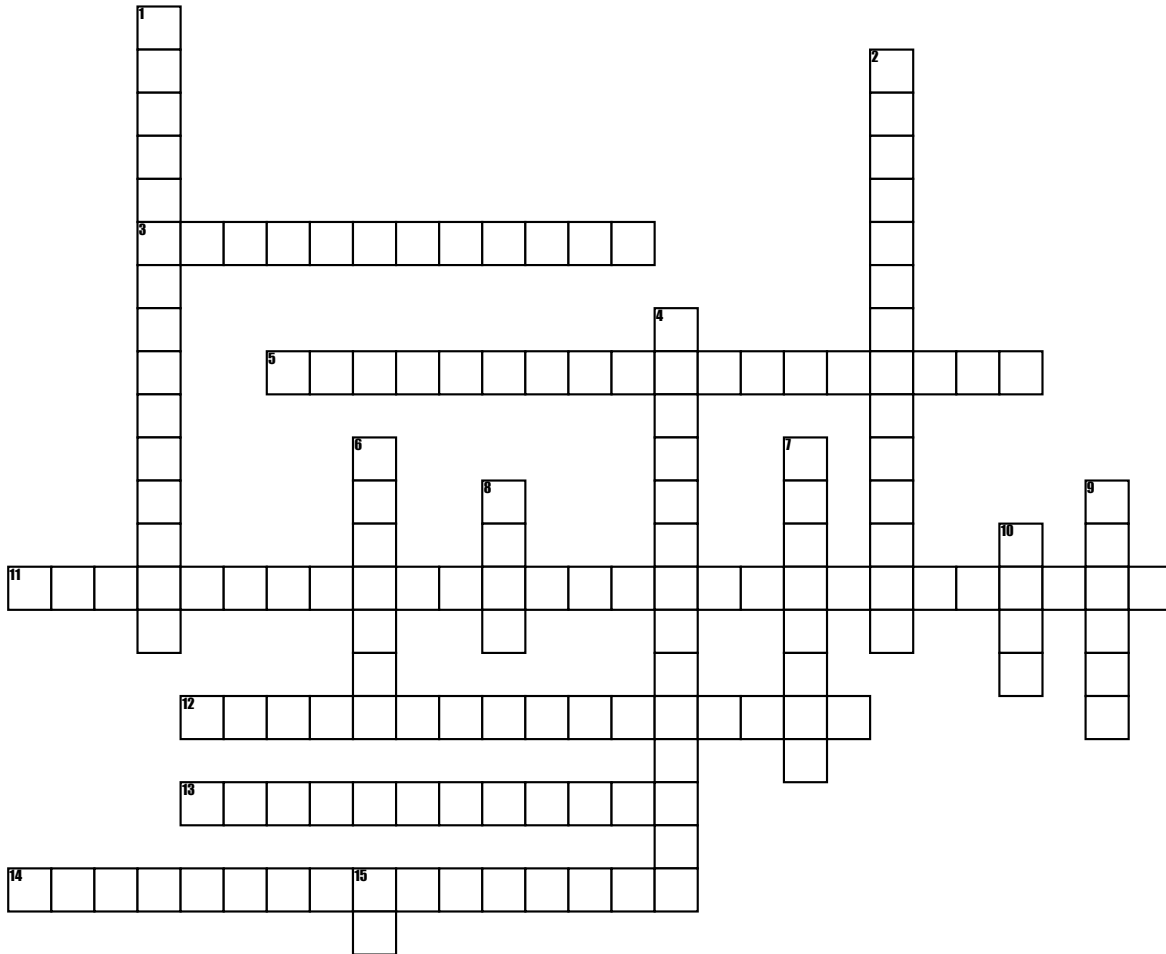


Integral Review



Across

3. find $f(x)$ if $f'(x) = 3x-1$ and $f(2) = 3$

5. Integral of $x dx$ / the square root of $5 - 2x^2$

11. Integral of $(\frac{3}{4})x^5 + (\frac{5}{3})x^2 - (\frac{1}{2})x dx$

12. Integral of $(\frac{3x^2}{\sqrt{x^3 + 1}})$

13. find d/dx if $[F(x)] =$ the integral of $\sin^3(t) dt$ from one to x^2

14. Integral of $x^3(x^4 + 2) dx$

Down

1. Integral of $2x(x^2 - 4)^7 dx$

2. Find the volume of the solid whose base is bounded by the circle $x^2 + y^2 = 25$ with equilateral triangle cross sections perpendicular to the x -axis

4. Integral of the square root of $x dx$

6. The acceleration of a particle moving along a straight line is given by $a = 6t$. If, when $t=0$, its velocity is 1 and its distance is 3, then at any time t the position is given by the function

7. Integral of $\sin(x) / (1 - \sin^2(x)) dx$

8. Definite integral of $x(x^2 + 1)^3 dx$ from zero to one

9. Find $f(x)$ is $f''(x) = 2$; $f(4) = 1$; $f(-1) = 2$

10. Integral of $7 dx$

15. Given that the graph of $f(x)$ passes through the point $(1,6)$, and that the slope of its tangent line at any point is $2x + 1$, find $f(6)$