

BACKWARD BEGINNINGS

I Notice

Use the information in the table below to find a pattern and then complete the table.

Derivative: $f(x)$	Antiderivative: $F(x)$
$3x^2$	x^3
$x^{-\frac{1}{2}}$	$2x^{\frac{1}{2}}$
$\frac{8}{x^9}$	$-\frac{1}{x^8}$
$8x^{\frac{1}{3}}$	$6x^{\frac{4}{3}}$
$x^{\frac{5}{2}}$	

I Think

Describe how you completed the table. Justify your answer.

We Think

Write a rule (verbal or algebraic) to describe how someone could start with the derivative in the left column and get to the antiderivative in the right column.