

1. A shirt-making company has been in business five years. This table shows the number of employees and the number of shirts produced each year.

Year in Business	Employees	Shirts
1	5	4,000
2	6	6,000
3	7	8,000
4	8	10,000

Write a function $E(x)$ that models the number of employees after x years of business. Then write a function $S(x)$ that models the number of shirts made after x years in business. Then write a rational function $A(x)$ for the average number of shirts made per employee after x years in business. Identify the discontinuities of the rational function.

Algebra II Practice A.CED.A.1: Modeling Rationals

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[1] $E(x) = x + 4$; $S(x) = 2000(x + 1)$ or $2000x + 2000$; $A(x) = \frac{2000x + 2000}{x + 4}$; $x \neq -4$
