Name: _____ Date: _____

AROC = (change in y) / (change in x) between two points. Last two are challenge problems!

1. From (1, 3) to (4, 9): find the average rate of change.

show your work

2. From (0, 10) to (5, 0):

show your work

3. Table: x = 2, y = 7 and x = 6, y = 19.

show your work

4. f(x) = x^2. AROC from x = 1 to x = 3.

show your work

5. A plant grows from 12 cm to 30 cm in 6 days. AROC?

show your work

6. f(x) = 2x + 5. AROC from x = 0 to x = 4.

show your work

7. Car value: $18,000 at year 0, $12,000 at year 4. AROC?

show your work

8. f(x) = x^2 - 3. AROC from x = -1 to x = 2.

show your work

9. ★ CHALLENGE

f(x) = x^2. Compare AROC on [0,2] vs [2,4]. What does it show?

show your work

10. ★ CHALLENGE

Population table: year 0: 500, year 2: 720; year 5: 1200. AROC over [0,5], and is [2,5] faster?

show your work