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/\*

Use subqueries to answer the following questions:

1. Has our organization sales grown over the years?

2. On average, what percent of salespeople make a sale each month?

3. What percent of all sales in the United States did returns make up in

2020?

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1.

SELECT DATE\_PART('year',order\_month) as order\_year, AVG(monthly\_sales) as monthly\_average\_sales\_per\_year

FROM (

SELECT DATE\_TRUNC('month',order\_date) as order\_month, SUM(sales) as monthly\_sales

FROM orders

GROUP BY order\_month

) AS fahmi

GROUP BY order\_year;

Answer;

2015 2114.0600000000000000

2016 789018.397500000000

2017 2535652.518333333333

2018 5688918.417500000000

2019 10904337.575000000000

2020 4447514.740000000000

2.

WITH MonthlySalesCounts AS (

SELECT

DATE\_TRUNC('month', order\_date) AS order\_month,

COUNT(DISTINCT salesperson) AS salespeople\_count

FROM regions AS r

INNER JOIN orders AS o ON r.region\_id = o.region\_id

GROUP BY order\_month

)

SELECT AVG(salespeople\_count \* 100.0 / total\_salespeople) AS average\_percent\_salespeople\_per\_month

FROM MonthlySalesCounts

CROSS JOIN (

SELECT COUNT(DISTINCT salesperson) AS total\_salespeople

FROM regions AS r

INNER JOIN orders AS o ON r.region\_id = o.region\_id

) AS TotalSalespeople

Answer

99.2000000000000000

3.

SELECT (

SELECT SUM(o.sales) AS return\_total\_sales

FROM orders o

JOIN regions g ON o.region\_id = g.region\_id

WHERE o.order\_id IN (

SELECT order\_id

FROM public.returns

)

AND g.country = 'United States'

AND DATE\_PART('year', o.order\_date) = 2020

) / SUM(sales) \* 100 AS return\_percent\_sale\_United\_States

FROM orders o

JOIN regions g ON o.region\_id = g.region\_id

WHERE DATE\_PART('year', order\_date) = 2020

AND g.country = 'United States';

Answer

8.31673922628654450300