SQL Question 1

Users’ response are stored in table called Survey

Select all Columns from the first 10 rows

What columns does the table have?

Answer:- question, user_id and response

SQL Question 2

What is the number of response for each questions?

Answer:- Q1 = 500
Q2 = 475
Q3 = 380
Q4 = 361
Q5 = 270

SQL Question 3

nt (distinct user_id)	question	response	% user
500	1. What are you looking for?	Women's Styles	100%
475	2. What's your fit?	Narrow	5%
380	3. Which shapes do you like?	Rectangular	20%
361	4. Which colors do you like?	Tortoise	5%
270	5. When was your last eye exam?	<1 Year	25%

SQL Question 4

What are the column name?

Answer:- Quiz = user_id, style, fit, shape, color

home_try_on = user_id, number_of_pairs, address

purchase = user_id, product_id, style, model_name, color, price

SQL Question 5

Question :- Use a LEFT JOIN to combine the three tables, starting with the top of the funnel (browse) and ending with the bottom of the funnel (purchase).
Select only the first 10 rows from this table (otherwise, the query will run really slowly).

Answer:-

```
select distinct b.user_id,
        c.user_id is not null AS 'is_home_try_on',
        c.number_of_pairs,
        p.user_id is not null AS 'is_purchase'
from quiz As 'b'
left join home_try_on As 'c'
on c.user_id = b.user_id
left join purchase As 'p'
on p.user_id = c.user_id
Limit 10;
```

SQL Question 6

```
WITH funnels AS
                (select distinct b.user_id,
                                c.user_id is not null AS 'is_home_try_on',
                                c.number_of_pairs,
                                p.user_id is not null AS 'is_purchase'
from quiz As 'b'
left join home_try_on As 'c'
on c.user_id = b.user_id
left join purchase As 'p'
on p.user_id = c.user_id),

final_funnel AS
                (Select user_id,
                  CASE
                   WHEN is_home_try_on = 1 THEN 'True'
                     ELSE 'False' END As is_home_try_on,
                  CASE
                    WHEN number_of_pairs = '3 pairs' THEN '3'
                    WHEN number_of_pairs = '5 pairs' THEN '5'
                     ELSE 'NULL' END AS number_of_pairs
FROM funnels)

select count (distinct user_id),
        number_of_pairs
from final_funnel
group by number_of_pairs;
```

SQL Question 6 (Table 1)

user_id	is_home_try_on	number_of_pairs
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	True	3
291f1cca-e507-48be-b063-002b14906468	True	3
75122300-0736-4087-b6d8-c0c5373a1a04	False	NULL
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	True	5
ce965c4d-7a2b-4db6-9847-601747fa7812	True	3
28867d12-27a6-4e6a-a5fb-8bb5440117ae	True	5
5a7a7e13-fbcf-46e4-9093-79799649d6c5	False	NULL
0143cb8b-bb81-4916-9750-ce956c9f9bd9	False	NULL
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	True	5
b1dded76-cd60-4222-82cb-f6d464104298	True	3

user_id	is_home_try_on	is_purchase	number_of_pairs
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	True	False	3
291f1cca-e507-48be-b063-002b14906468	True	True	3
75122300-0736-4087-b6d8-c0c5373a1a04	False	False	NULL
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	True	False	5
ce965c4d-7a2b-4db6-9847-601747fa7812	True	True	3
28867d12-27a6-4e6a-a5fb-8bb5440117ae	True	True	5
5a7a7e13-fbcf-46e4-9093-79799649d6c5	False	False	NULL
0143cb8b-bb81-4916-9750-ce956c9f9bd9	False	False	NULL
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	True	False	5
b1dded76-cd60-4222-82cb-f6d464104298	True	False	3

SQL Question 6 (Table 2)

Calculate the difference in purchase rates between customers who had 3 number_of_pairs with ones who had 5.

count (distinct user_id)	number_of_pairs	is_purchase
379	3	False
371	5	True
250	NULL	False

SQL Question 6

What are some actionable insight for Warby Parker?

Answer:- Judging from the tables, the number_of_pairs influenced the customer purchase. We can see that customer that had home_try_on came back to purchase

Customers that had 5 home_try_on had the total number of purchase which tells us that the more options of glasses they had (home_try_on), the higher their probability of purchase