Q1.

a)

b)

c)
d)
Q2.

a) The set with all tuples (a,b) where one or both of the conditions below are true:
   a = 10 and b is any integer or null.
   a is any integer or null and b = 20.

b) The set containing exactly the tuple (10,20).

c) The set with all tuples (a, b) where a is any integer and is not null, and b is any integer or null.

d) The set of all tuples (a, b) where a and b are the same integer that is not null.

Q3.

a)

CREATE VIEW BestSeller(BookID, Title, Author, Amount) AS

SELECT B.bid, B.bname, B.author, SUM (B.price * O.quantity)
FROM Books B, Orders O
WHERE B.bid = O.bid
GROUP BY B.bid, B.bname, B.author
HAVING SUM(O.quantity) > 100000;

b)

SELECT BS.BookID, BS.Title, BS.Author
FROM BestSeller BS
WHERE BS.Amount = (SELECT MAX(Amount) from BestSeller);
c)

SELECT BS.Author
FROM BestSeller BS
WHERE BS.Author IN ( 
    SELECT TMP.Author
    FROM ( 
        SELECT BS1.Author, SUM(BS1.Amount) AS Revenue
        FROM BestSeller BS1
        GROUP BY BS1.Author
    ) TMP
    WHERE TMP.Revenue = (SELECT (MAX(Revenue) FROM TMP))
);