

GCSE Biology A (Gateway)

J247/02 B4-B6 and B7 Foundation (Foundation Tier)

Question Set 17

1

This question is about selective breeding.

(a) The table shows the main steps in the process of selective breeding.

They are **not** in the correct order.

A	Repeat the process over many generations.
B	Decide which features are wanted.
C	Choose the individuals that have the features that are wanted.
D	Choose the offspring that have the features that are wanted.
E	Allow the individuals to mate.

Write the letters in the boxes below to give the correct order.

Two have been done for you.

<input type="text"/>	<input type="text" value="C"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>
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[2]

(b) Cows are female and are used by farmers to produce milk.

Bulls are male.

Look at the details of different varieties of cows and bulls.

Variety	Milk production	Aggressive
Cow A	thin and watery	no
Cow B	medium yield and creamy	no
Cow C	medium yield and creamy	yes
Bull A	mother produced high yield	yes
Bull B	mother produced high yield	no
Bull C	mother produced low yield	no

A farmer wants to produce cows that produce a high yield of creamy milk.

He does **not** want his animals to be aggressive.

Suggest which cow and bull he should choose to mate with each other.

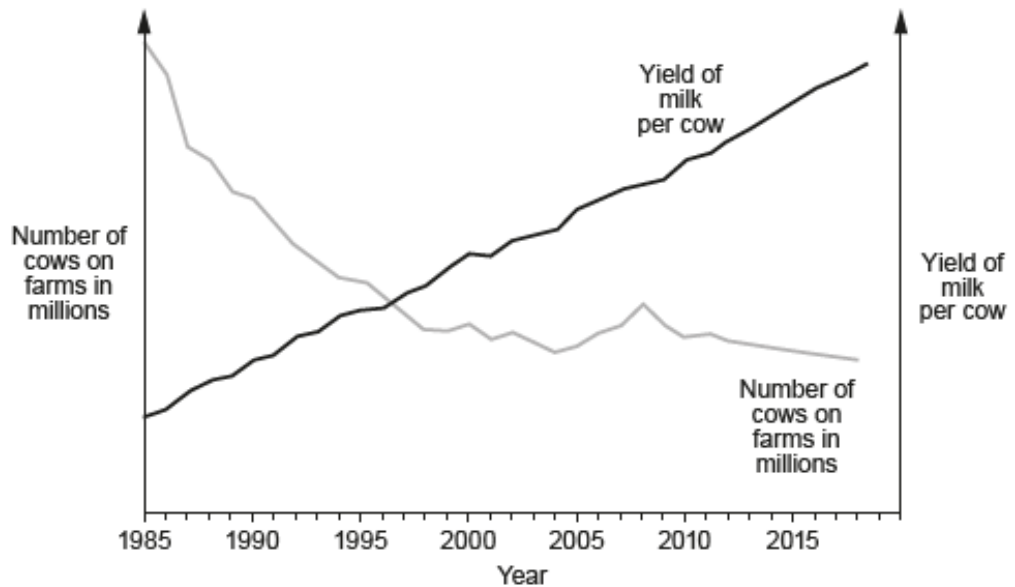
Explain your answer.

cow × bull

Explanation:

[4]

- (c) The graph shows the number of cows and the yield of milk per cow on farms in the USA since 1985.



- (i) Describe the relationship between number of cows and yield of milk shown in the graph.

[1]

(ii) Suggest **two** reasons for the relationship shown in the graph.

1

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2

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[2]

Total Marks for Question Set 17: 9

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