

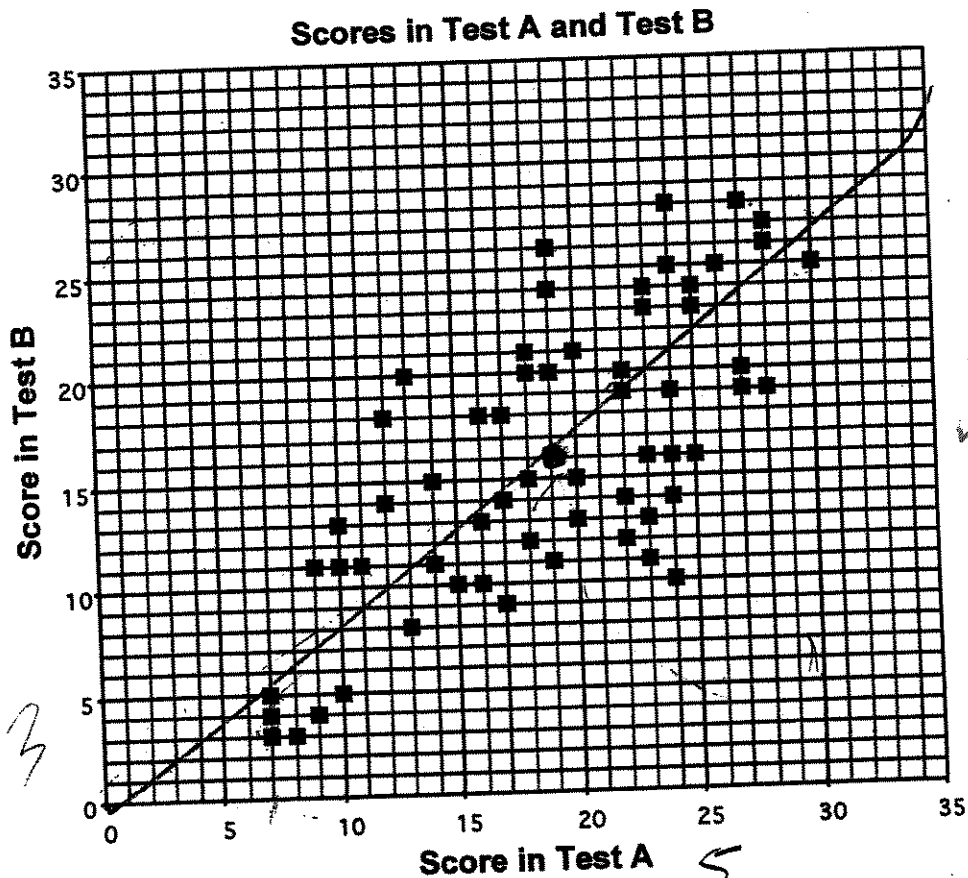
Scatter Diagram

T1

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B. In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16. Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To find the average score on Test B when you know the score for Test A or to find the score for Test A when you know the score for Test B.

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

T1

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	NO The lowest score on Test A is higher than the lowest score for Test B. ✓
The range of scores on Test B is 25.	✓ ✓
The student with the highest score on Test A also has the highest score on Test B.	The student w/ the highest score for Test A has the 6 th highest score on Test B. ✓
The biggest difference between a student's scores on the two tests is 5.	NO The biggest difference is 14. ✓

Scatter Diagram

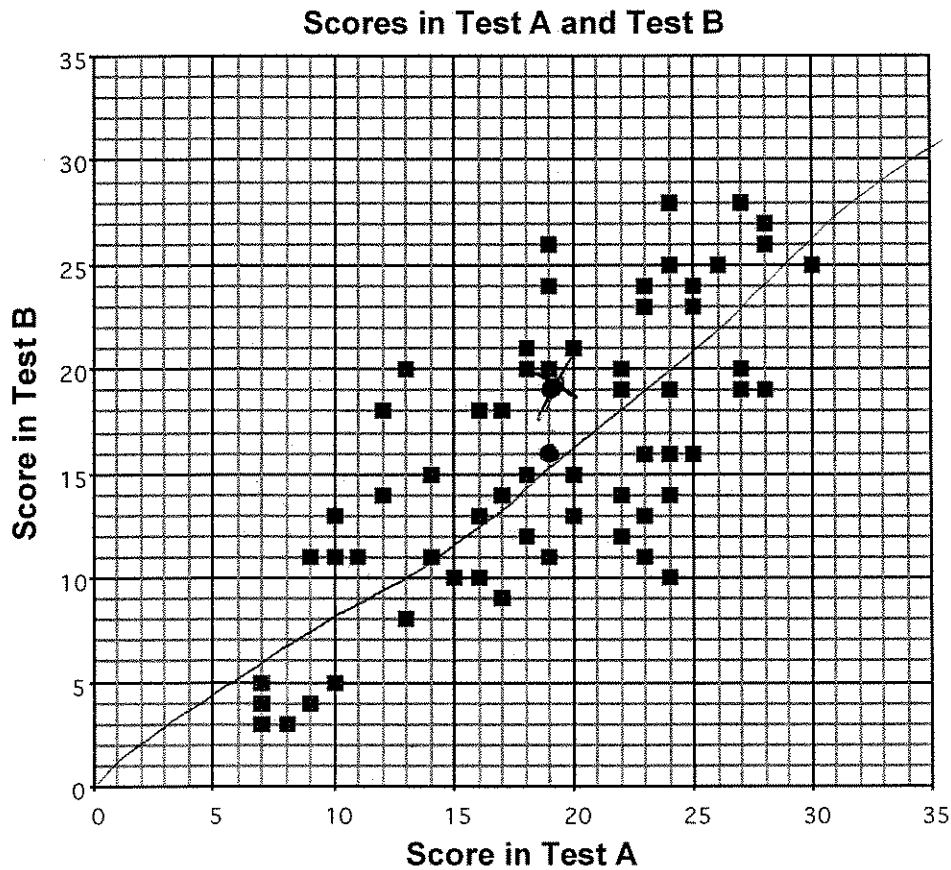
T2

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To find an estimate of unknown test score when you know the other.

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest test score for Test A and B are the same.
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	✓
The biggest difference between a student's scores on the two tests is 5.	✓

1

0

1

0

0

8 (5)

Scatter Diagram

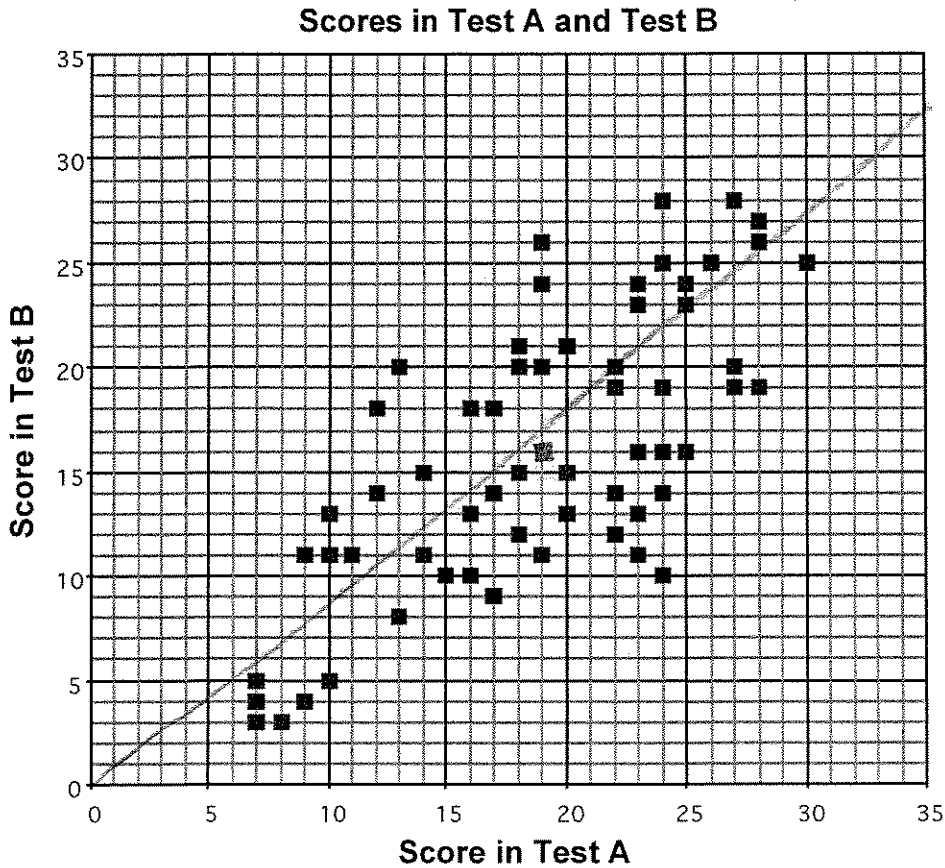
T3

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.

Plot a point to show this on the scatter diagram.

1

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To show the average test scores

1
0

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

T3

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on test A is 4 better than the lowest on B.
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The highest score on test A is 2 higher than the highest score on B.
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores on the two tests is 14.

Scatter Diagram

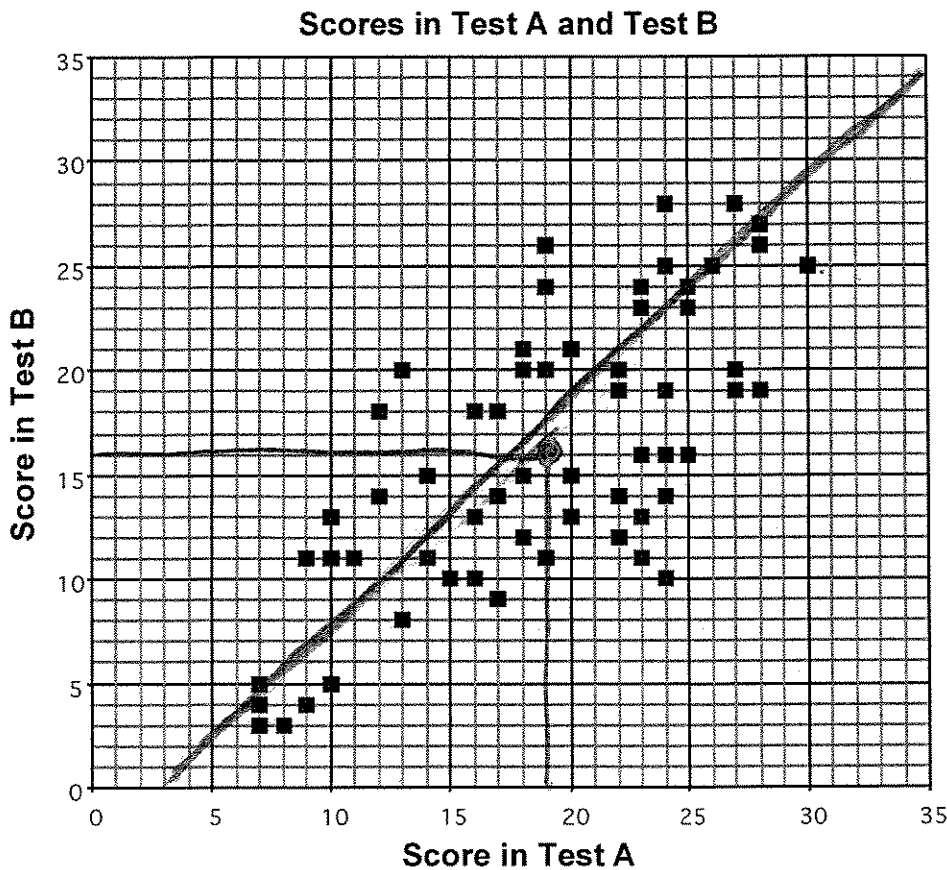
T4

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

with a ruler

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

T4

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test A is larger than the lowest score on Test B.
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	is 30 is 25
The biggest difference between a student's scores on the two tests is 5.	✓

✓ |

✓ |

✓ |

0

0

Scatter Diagram

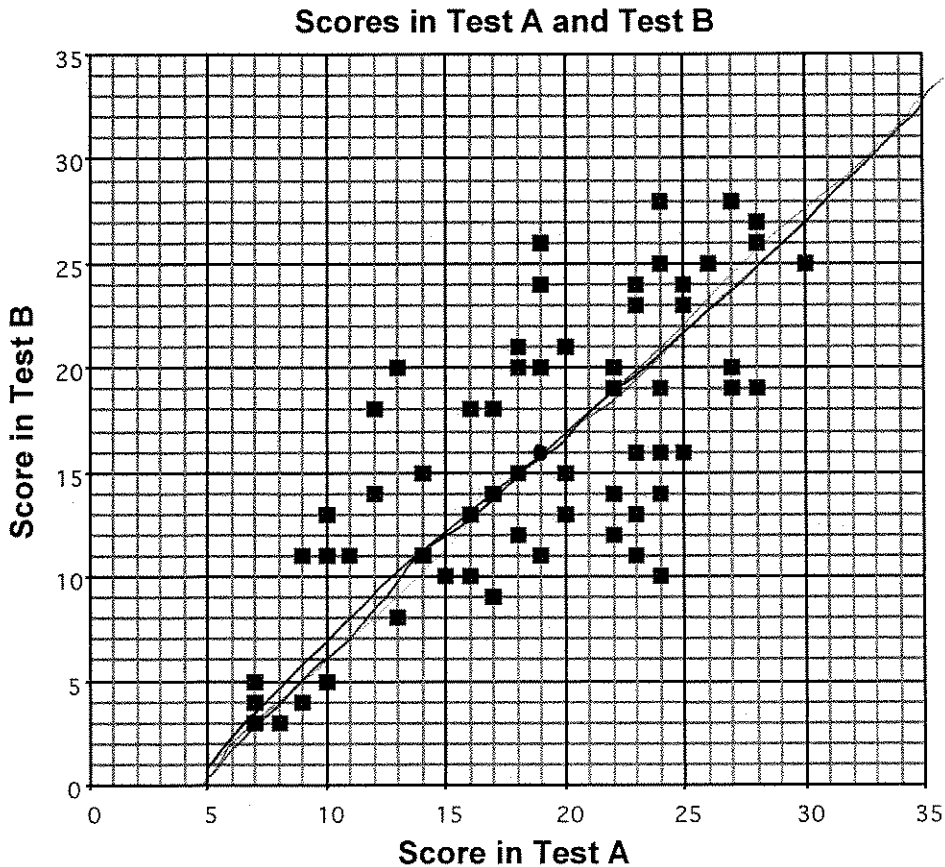
T5

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To show where an ~~area~~ average score is.

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

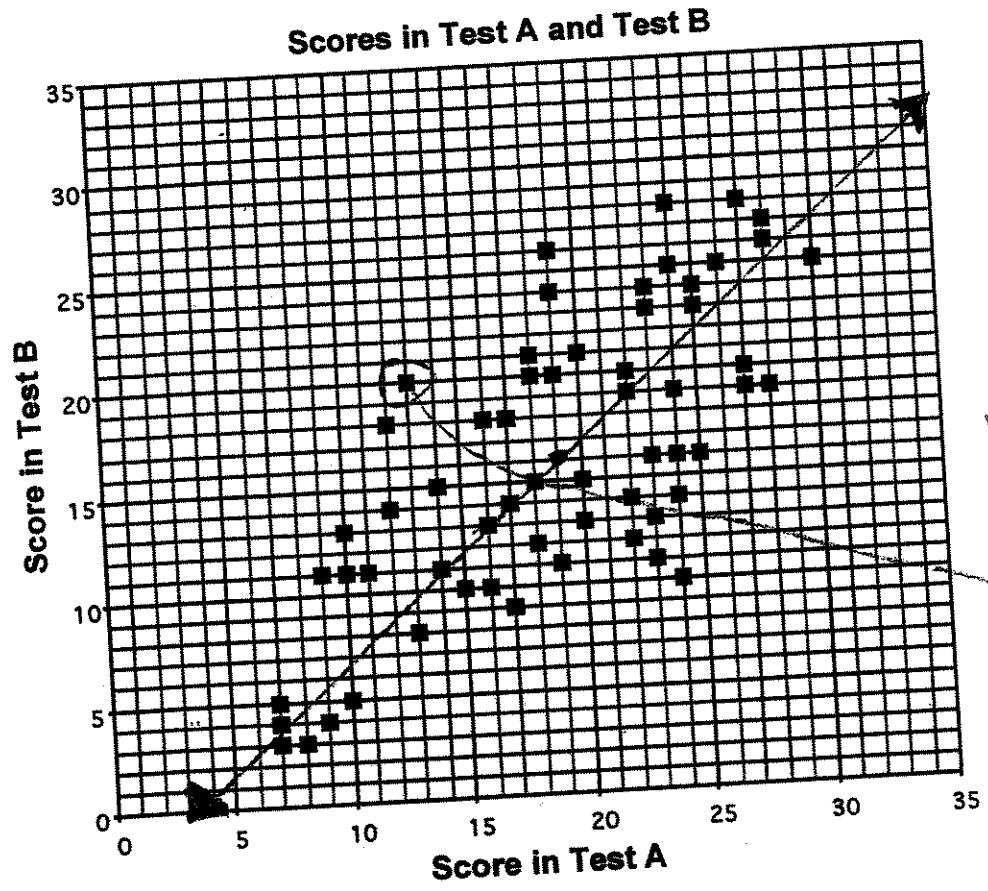
Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test B was lower than the lowest score on Test A.
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A did not get the highest score on Test B.
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's score on the two tests is 7.

Scatter Diagram

S1

This problem gives you the chance to:
• discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.
In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To make estimations of a test score
when you do not have both scores

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	Test B's lowest score is 4 points lower than Test A's lowest. ✓
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A does not have the highest score on B by 3.
The biggest difference between a student's scores on the two tests is 5.	No, one student, for instance, has a difference of 17. ↑

Scatter Diagram

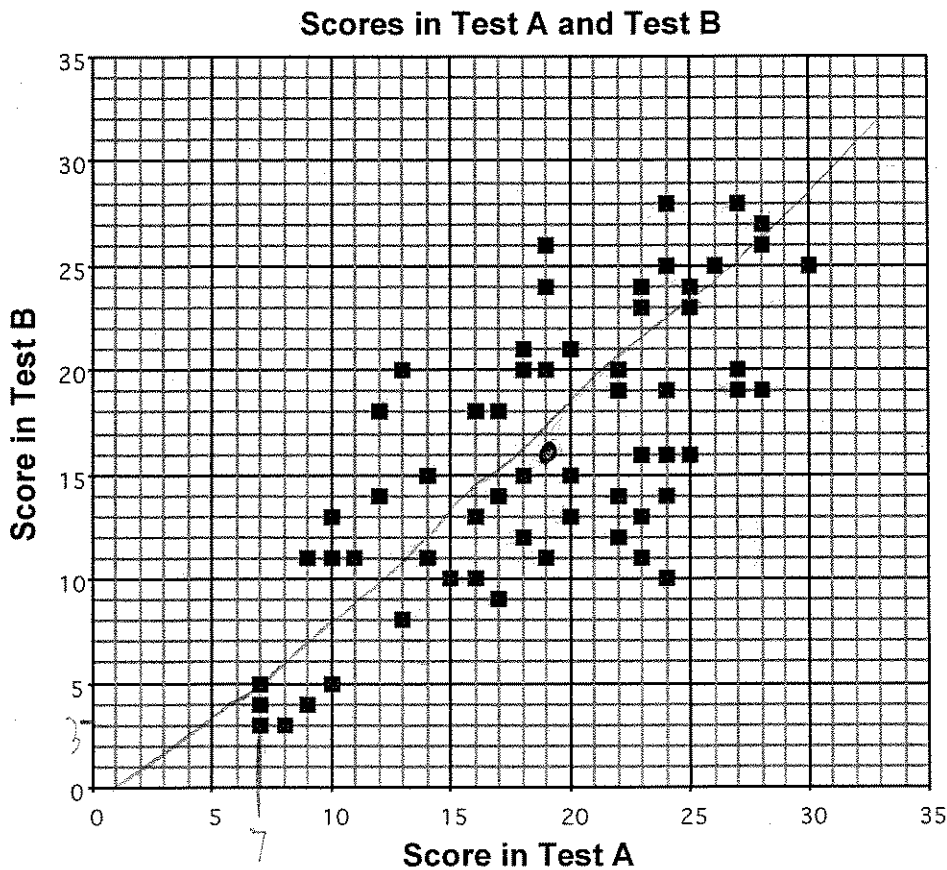
S2

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

it can be used to find average scores.

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test A is higher than the lowest score on Test B.
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on test A needed 5 pts more to be the highest on test B.
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores is 14.

8 (6)

Scatter Diagram

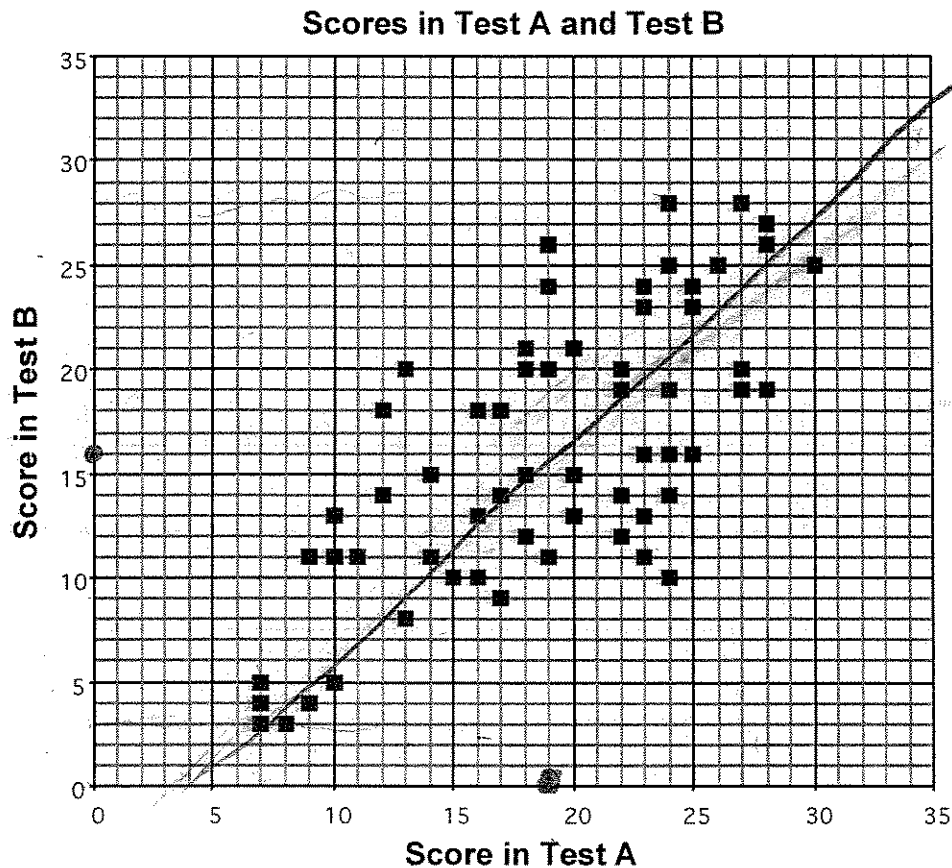
S3

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.

Plot a point to show this on the scatter diagram.

0

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

to show relationships and the average amount of the data

0

x

0

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test B is lower than the lowest score on Test A ✓
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A did not have the highest score on Test B ✓
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores on the 2 tests are 14 ✓

Scatter Diagram

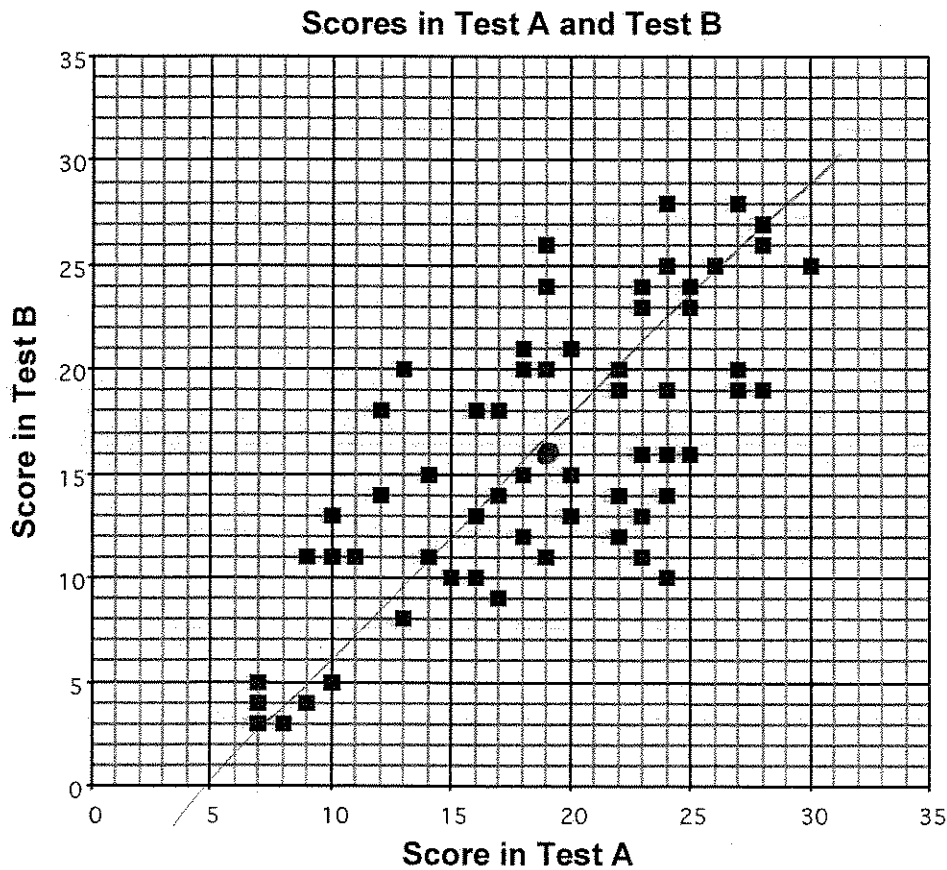
S4

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

It shows the various scores that the students got on the tests

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score for test A is higher than the lowest score for test B. ✓
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on test A didn't have the highest score for test B. ✓
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores is larger than 5. ✓

Scatter Diagram

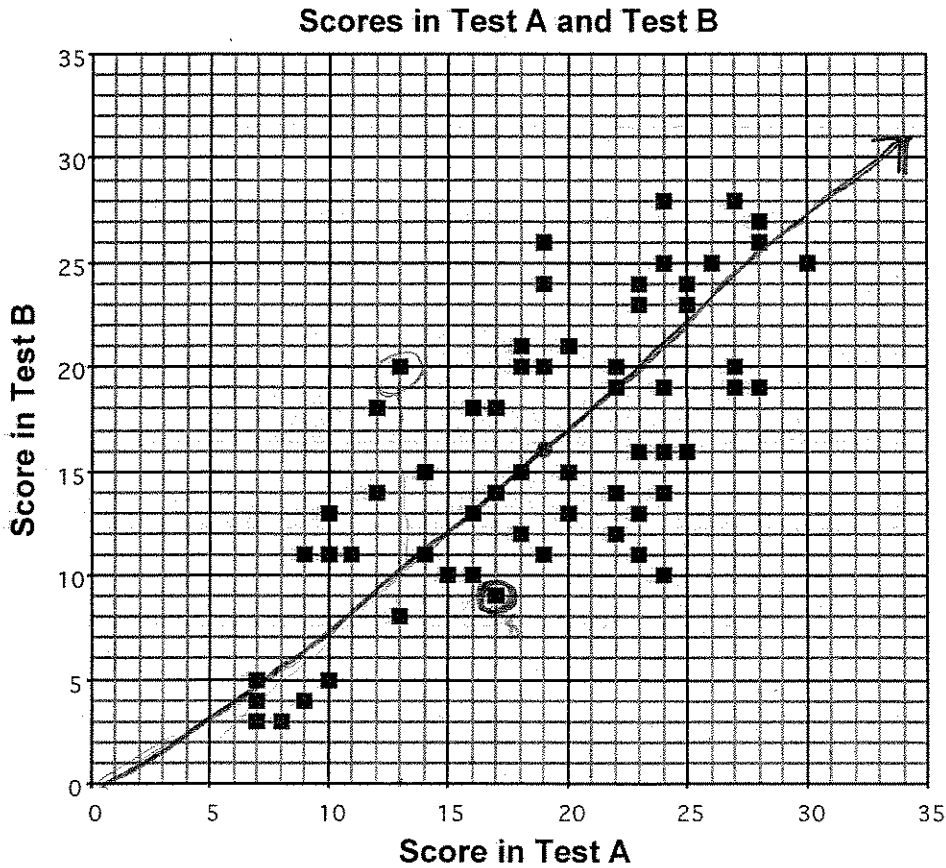
S5

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



X

1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To see how close a person was to the
average

0

1

0

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

S5

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	✓ x
The range of scores on Test B is 25.	The range of scores on Test B is 23. x
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A, doesn't have the highest on Test B. ✓
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores on the two tests is 8. ✓

1

0

0

1

1

$2-9 = 8 > 5$
 $10-13 = 7 > 5$

8

4

Scatter Diagram

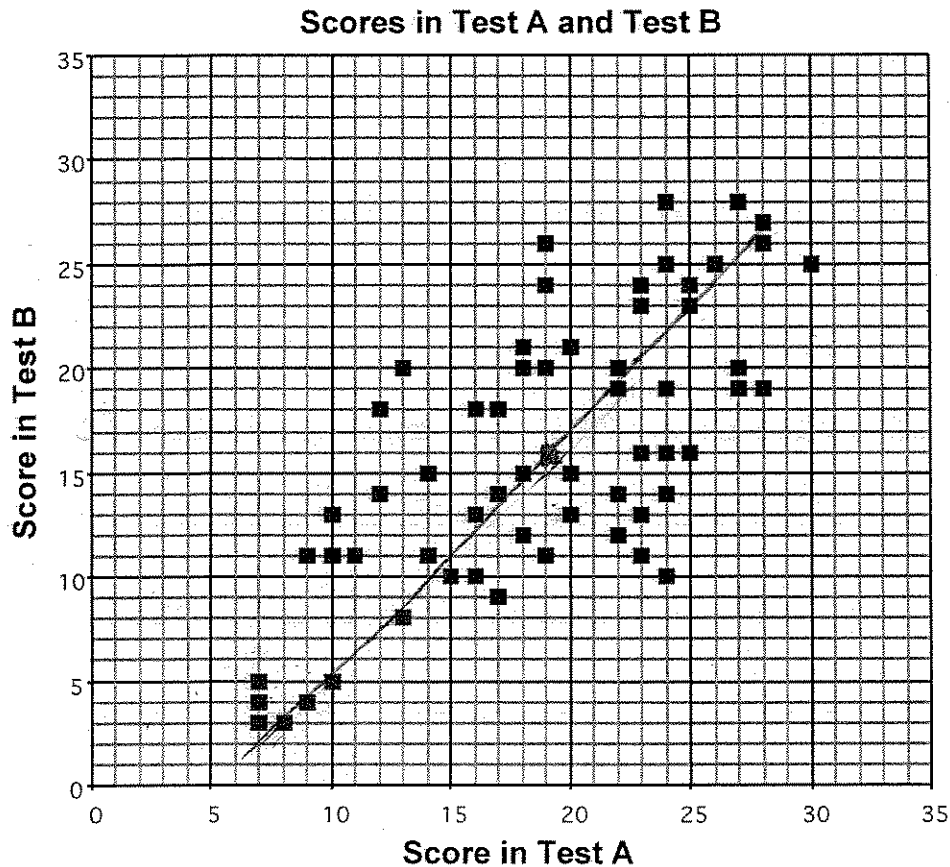
S6

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

A line of best fit can be used to show about where the average scores for the test were.

3. Here are five statements about the scores shown on the scatter diagram.

S6

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test B is lower than the lowest score for Test A.
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A did not have the highest score on Test B.
The biggest difference between a student's scores on the two tests is 5.	The smallest difference between a student's scores on the two tests is 0 X

1
1
1
1
0

Scatter Diagram

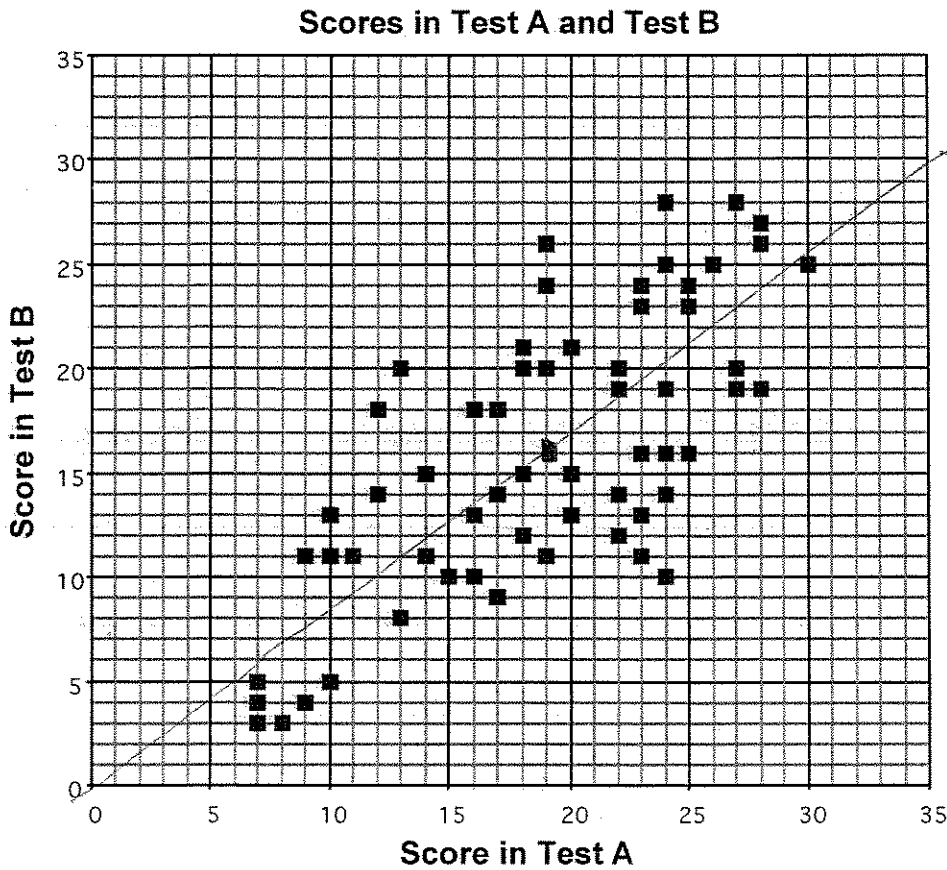
S7

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.

Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

It can be used to show the averages of both tests, + how many made above or below average.

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	The scatter diagram shows no correlation between scores on Test A + scores on Test B. X
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test A is the same as the lowest score for Test B. X
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A didn't have the highest score on Test B. ✓
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores on the two tests is 6. X

0
0
1
1
0

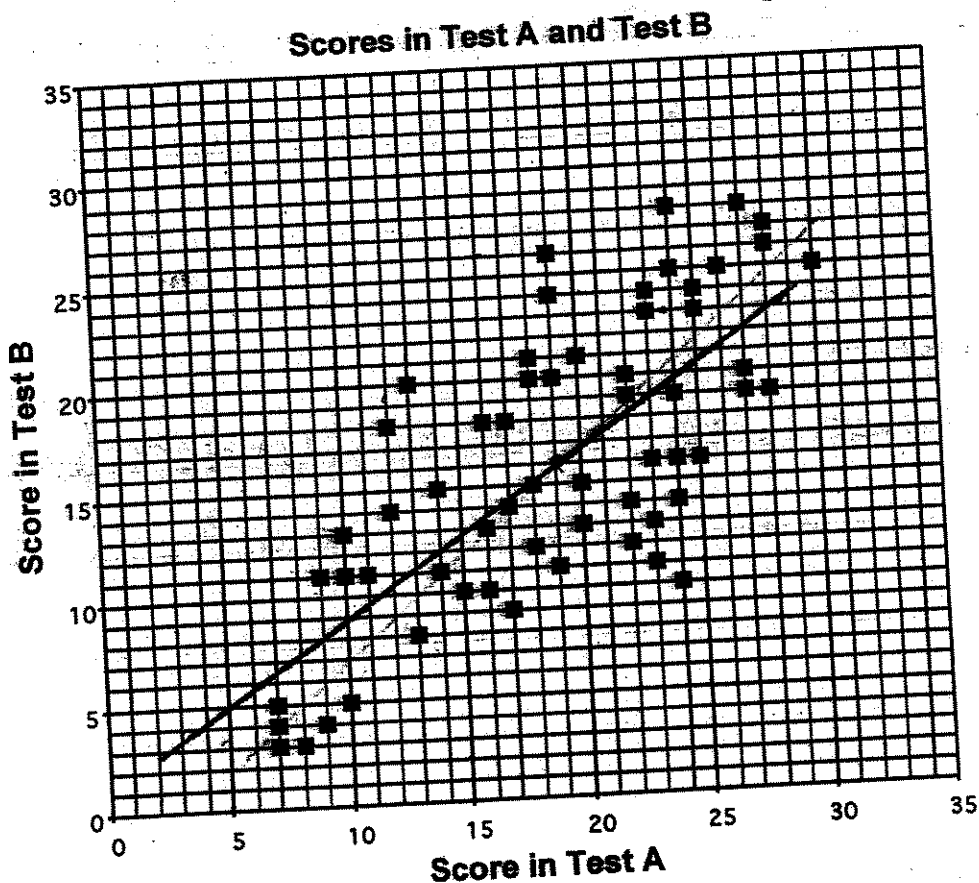
Scatter Diagram

S8

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B. In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16. Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

This line is used so that anyone with a low test
on test a can have an approximate estimation of test B

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.
If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test B is lower than the lowest score on Test A ✓
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A does not have the highest score on Test B.
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores on the two tests is 14.

Scatter Diagram

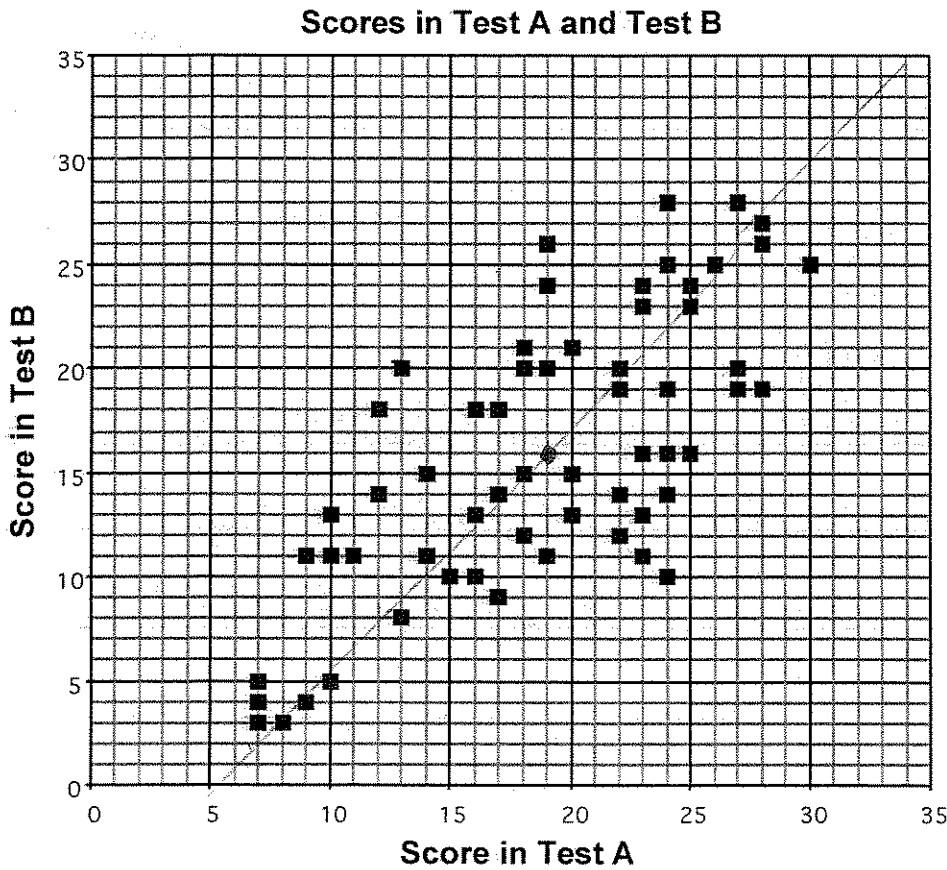
S9

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.
Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

To figure out the ^{approximate} average score on each test for the lowest scoring students, the highest scoring students, and all between.

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on test B is not lower than the lowest score on test A. ✓
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student with the highest score on Test A did not score the highest score on test B. ✓
The biggest difference between a student's scores on the two tests is 5.	The biggest difference between a student's scores on the two tests is 14. ✓

Scatter Diagram

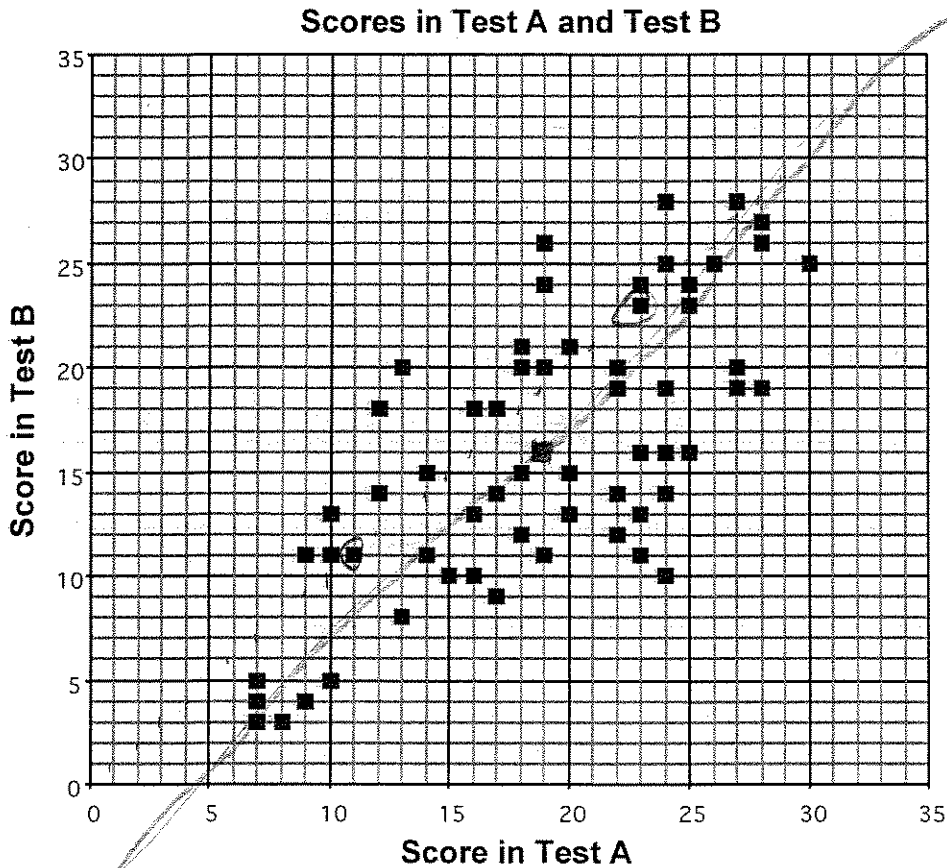
S10

This problem gives you the chance to:

- discuss and understand a scatter plot of real data

A group of 66 students took two tests; Test A and Test B.

In the scatter diagram, each square represents one student and shows the scores that student got in the two tests.



1. The mean score for Test A was 19 and the mean score for Test B was 16.

Plot a point to show this on the scatter diagram.

2. Draw a line of best fit on the scatter diagram.

How can a line of best fit be used?

It can be used to tell where 2 test marks reflected upon the average

3. Here are five statements about the scores shown on the scatter diagram.

If a statement is true check (✓) it.

If it is not true, write a correct statement.

S10

Statement	Check (✓) or write correct statement
The scatter diagram shows positive correlation between the scores on Test A and the scores on Test B.	✓
The lowest score on Test A is lower than the lowest score for Test B.	The lowest score on Test B is lower than the lowest score for Test A ✓
The range of scores on Test B is 25.	✓
The student with the highest score on Test A also has the highest score on Test B.	The student who shared the lowest score on Test A also shared the lowest score on Test B.
The biggest difference between a student's scores on the two tests is 5.	The smallest difference between a student's scores on the two tests is 0. X

8

6