Example A

PROBLEM:

Does the income for males tend to be greater than the income for females from the SURF household income database?

PLAN

Take a sample of approx 30 males and approx 30 female from the SURF household income database. (This has been done using Fathom to take the sample).

DATA

Read and record the income for each person.

ANALYSIS



Middle 50%: Shift: From the samples I notice...

Write a conclusion using the headings below.

Answer the problem:

Does the income for males tend to be greater than the income for females from the SURF income database?

EITHER: I am able to make a claim that ...

OR: It is too close to call ...

Explain why you have made this conclusion. Evidence:

If I took another sample...

Does this conclusion make sense with what you personally know about incomes for males and females? Why/ why not?

Example B

PROBLEM:

Do the iron levels of South Island urban boys tend to be lower than the iron levels of South Island urban girls?

PLAN

In the late 1990s a study was undertaken in the South Island to explore iron levels in babies and toddlers (age 6-24 months). The participants were selected randomly from Christchurch, Dunedin and Invercargill (South Island Urban).

Take a sample of approx 100 boys and approx 100 girls from the 1990s iron levels study in the South Island. (This has been done using Fathom to take the sample).

DATA

Read and record the ferritin level for each child.

"Ferritin is a ubiquitous protein that stores iron and releases it in a controlled fashion. The protein is produced by almost all living organisms, including bacteria, algae and higher plants, and animals. In humans, it acts as a buffer against iron deficiency and iron overload. Ferritin serves to store iron in a non-toxic form, to deposit it in a safe form, and to transport it to areas that it is required." <u>http://en.wikipedia.org/wiki/Ferritin</u>

ANALYSIS



Middle 50%: Shift: From the samples I notice...

Write a conclusion using the headings below.

Answer the problem:

Do the iron levels of South Island urban boys tend to be lower than the iron levels of South Island urban girls?

EITHER: I am able to make a claim that ...

OR: It is too close to call ...

Explain why you have made this conclusion. Evidence:

If I took another sample...

From exploring the literature a number of factors were suggested that could have an effect on the levels of iron. Among these were: sex – boys at higher risk; premature babies – lower iron stores; formula fed babies – formula is fortified with iron; and cow's milk – low in iron.

Does this conclusion make sense with what the literature is suggesting in regard to sex of the child? Why/ why not?

Practice examples for level 6 making the call guide

Example C

PROBLEM:

Do the weights of girls' school bags tend to be greater than the weights of boys' school bags in the 14 middle schools?

PLAN

Take a sample of approx 30 males and approx 30 females from the 14 middle schools database. (This has been done using Fathom to take the sample).

DATA

Read and record the bag weight for each person.

ANALYSIS



Middle 50%: Shift: From the samples I notice...

Write a conclusion using the headings below.

Answer the problem:

Do the weights of girls' school bags tend to be greater than the weights of boys' school bags in the 14 middle schools?

EITHER: I am able to make a claim that ...

OR: It is too close to call ...

Explain why you have made this conclusion. Evidence:

If I took another sample...

Does this conclusion make sense with what you personally know about bag weights for middle school males and females? Why/ why not?

Example D

PROBLEM:

Do the weights of girls' school bags tend to be greater than the weights of boys' school bags in the 14 middle schools?

PLAN

Take a sample of approx 100 males and approx 100 females from the 14 middle schools database. (This has been done using Fathom to take the sample).

DATA

Read and record the bag weight for each person.

ANALYSIS



Middle 50%: Shift: From the samples I notice...

Write a conclusion using the headings below.

Answer the problem:

Do the weights of girls' school bags tend to be greater than the weights of boys' school bags in the 14 middle schools?

EITHER: I am able to make a claim that ...

OR: It is too close to call ...

Explain why you have made this conclusion. Evidence:

If I took another sample...

Does this conclusion make sense with what you personally know about bag weights for middle school males and females? Why/ why not?