GRADE 7 SOCIAL STUDIES / GLOBAL QUALITY OF LIFE

# Same average. Same access?



A fictional neighbourhood library. Illustration generated with AI.

THE TOWN REPORTS

In each neighbourhood, the average walk to the same library is 15 minutes.

**What would you want to know before deciding whether households have similar access to the library?**

# Who can get there?

**Name** _____ **Date** _____

These are fictional walking times. Each neighbourhood has four households. Count each household once.

**Walking time to the library (minutes)**

| Neighbourhood | Household 1 | Household 2 | Household 3 | Household 4 |
|---|---|---|---|---|
| **A** | **15** | **15** | **15** | **15** |
| **B** | **3** | **7** | **20** | **30** |

## 1 Check the average

Add the four times, then divide by 4 to find the mean. Show your work.

**A** _____ **B** _____

## 2 Check who meets the 15-minute cutoff

Circle each time of 15 minutes or less. Count the circled households.

**A** _____ out of 4 **B** _____ out of 4

**What do the counts tell you that the two means leave out?**

_____

_____

**TRY A ROUTE CHANGE**

A new path cuts B's 30-minute trip to 15 minutes. Only that trip changes.

**New total** _____ min **New mean** _____ min **At or below 15 min** _____ out of 4

**Which trip still exceeds the cutoff?** _____

# What can a score hide?

The United Nations Development Programme (UNDP) compares human development across countries. Here are two measures it uses.

## HDI

**Human Development Index**

Summarizes how a country does in health, education and standard of living.

## IHDI

**Inequality-adjusted HDI**

Adjusts that score for how unevenly those outcomes are shared among people.

**REPORTED VALUES FOR 2023**

| Country | HDI | IHDI |
|---|---|---|
| **Norway** | 0.970 | 0.909 |
| **Switzerland** | 0.970 | 0.894 |

Data from UNDP, Human Development Report 2025, Table 3. Selected values reformatted.

Original Table 3 (PDF) CC BY 3.0 IGO

## 1 Read across the rows

Which values match as printed? Which values differ? Cite numbers.

## 2 Make the connection

How does comparing the two measures remind you of the library investigation?

## 3 Ask a resident

Ask a resident of either country about their daily life. How might their answer change what you think?

# Teach the investigation

Project page 1. Print page 2, and add page 3 for the source study.

### 6-minute launch

Project and predict (1 min). In pairs, check the means and the cutoff (3 min). Share what the counts reveal (2 min).

### 10- to 12-minute lesson

Project (1 min), compare times (3 min), test the route (2 min), read and discuss the source (2-4 min), then debrief (2 min).

**WORKED KEY / STUDENT PAGES 2 AND 3**

### 1. Check the average

A (15 + 15 + 15 + 15) ÷ 4 = 60 ÷ 4 = 15 min

B (3 + 7 + 20 + 30) ÷ 4 = 60 ÷ 4 = 15 min

### 2. Check the cutoff

A has 4 of 4 at or below 15 minutes. B has 2 of 4 (3 and 7 minutes). The same mean can describe different trips and different numbers of households within the cutoff.

### Try a route change

B's new times are 3, 7, 20 and 15 minutes. The total is 45 minutes and 45 ÷ 4 = 11.25 minutes. Now 3 of 4 meet the cutoff. The 20-minute trip still exceeds it.

### Read the source and make the connection

Both reported HDI values are 0.970 to three decimal places. The IHDI values differ (0.909 and 0.894) when inequality is accounted for. A matching summary can hide differences. The IHDI is a different measure from the library cutoff.

### Ask a resident

"How do you meet people in your community?" could reveal what helps someone feel connected. For the library, ask how icy weather, mobility, transit or opening hours affect use. Keep claims tied to the measure and invite residents' views.

### Support

Read the rows aloud. Mark times on a 0-30 minute number line and count the marks at or below 15. Allow oral responses.

### Extend

Compare both neighbourhoods with a 10-minute cutoff. Now A has 0 of 4 and B has 2 of 4. Who should help set the cutoff?

Cluster 2 entry point. 7-KC-002 explores factors that affect quality of life. 7-VE-016 invites students to consider what else matters beyond wealth, resources and technology.

**Manitoba Grade 7 curriculum** **UNDP explanation of IHDI**