

# Demystifying numbers

Editing numerical  
content in prose,  
diagrams, tables  
and graphs

presented by Denise Holden

# Why worry about numbers?

Improve organisation and content

Clarify meaning

Ensure consistency, accuracy  
completeness

Suit purpose

Meet audience needs

# Why worry about numbers?

Prose

← Reports →

Scientific

The annual slate of feature films and TV drama productions consists of Australian titles (including official co-productions) and foreign titles that start production or post, digital and visual effects (PDV) during a given year.

## DRAMA EXPENDITURE IN AUSTRALIA

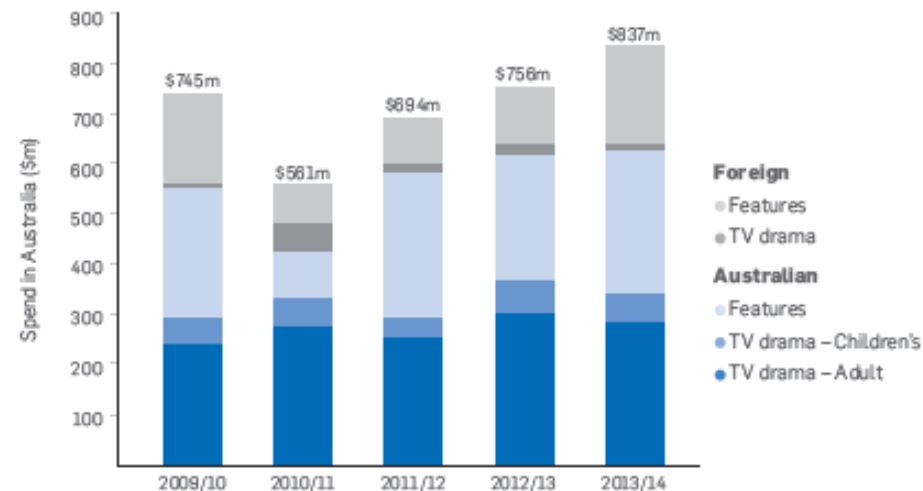
- **Total expenditure** in Australia by the 2013/14 drama slate was \$837 million, an 11 per cent increase on the previous year, and the highest on record. Australian TV drama accounted for 41 per cent of expenditure, Australian feature films 35 per cent and foreign activity (primarily feature production) 24 per cent.
- **Expenditure by the Australian slate** – domestic productions and official co-productions – totalled \$640 million, comprising 595 hours of TV drama (49 titles) spending \$343 million, and 35 features spending \$297 million.
- **Australian TV drama expenditure** decreased by 8 per cent from last year's record high. Expenditure by the adult TV slate was above the five-year average, while children's TV drama expenditure was on par with the average.

- **Australian feature production** increased on last year and was above the five-year average, boosted by the high-budget titles, *Gods of Egypt* and *The Water Diviner*. This year's slate comprised three co-production titles, compared to none last year.
- **Foreign activity** accounted for expenditure in Australia of \$197 million in 2013/14, up from \$131 million last year, primarily due to the high-budget US features *Unbroken* and *San Andreas*. Nine foreign features and two foreign TV dramas started shooting in Australia during the year, and 15 foreign projects (all features) undertook PDV in Australia without shooting here.

## EXPENDITURE BY LOCATION

- Of total 2013/14 drama expenditure, 42 per cent occurred in NSW, 31 per cent in Victoria and 15 per cent in Queensland.

Foreign and Australian feature and TV drama expenditure



# Why worry about numbers?

**Benefits clients**

**Benefits readers**

**Benefits you**

# What's involved in editing numbers?

# What's involved?

Clarity

Consistency

Completeness

Accuracy



**Clutter**

**Context**

**Conciseness**

# What's involved?

Clarity

Consistency



Completeness

Accuracy



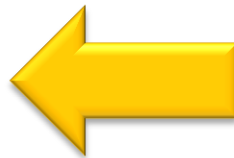
# What's involved?

Clarity

Consistency

Completeness

Accuracy



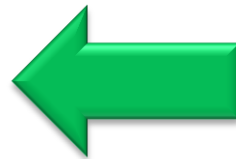
# What's involved?

Clarity

Consistency

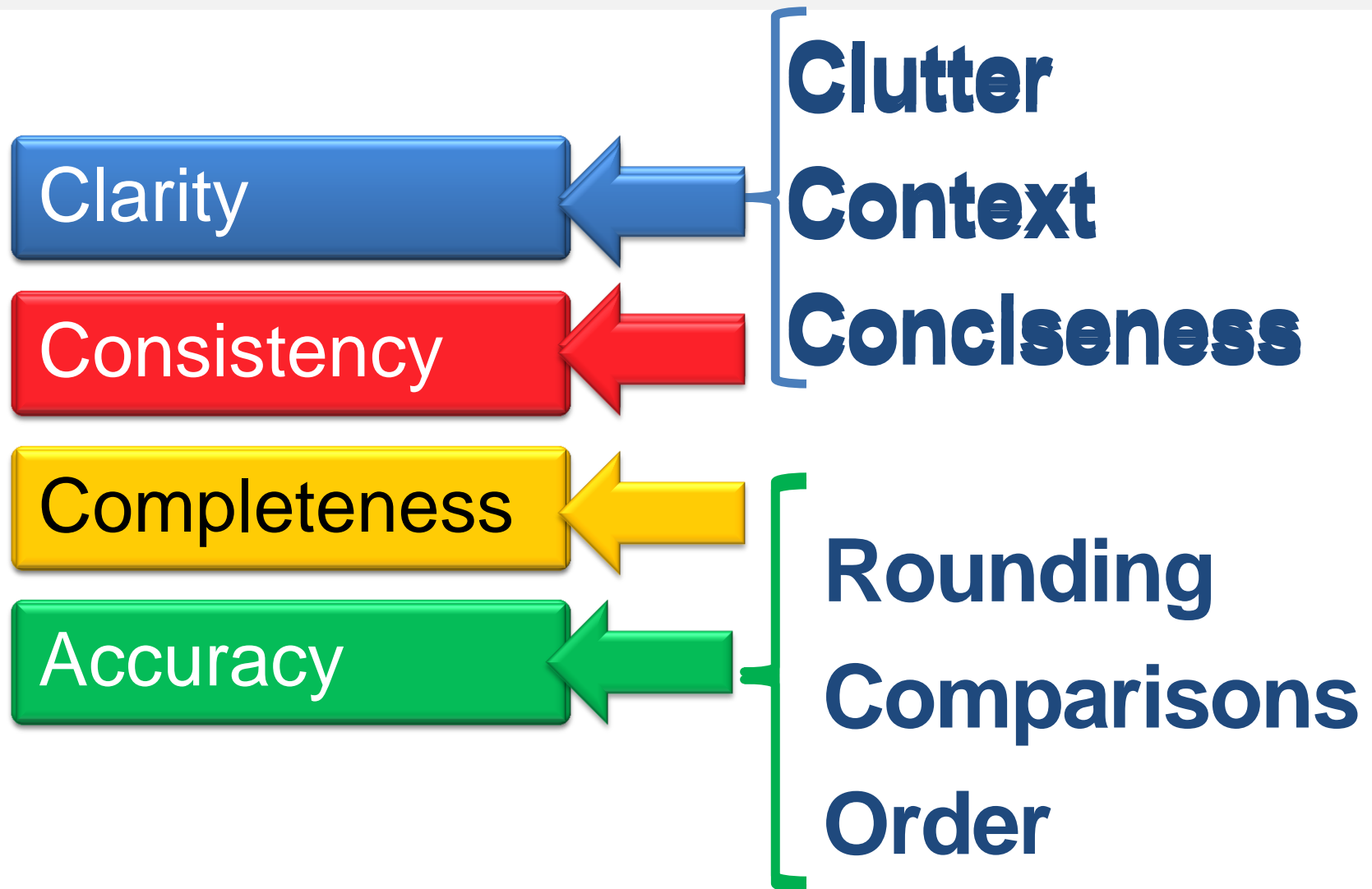
Completeness

Accuracy



**Rounding**  
**Comparisons**  
**Order**

# What's Involved?



# Guidelines for editing tables

# Parts of a table

Measurement units  
Table number and title

**TABLE 1: PURE ALCOHOL AVAILABLE FOR CONSUMPTION**

Year ended  
30 June

Beer Wine Spirits RTDs(a) Cider(b) Total

**VOLUME OF PURE ALCOHOL ('000 litres)**

Column headings

Stub  
heading

2008	79 496	62 807	20 148	18 693	1 087	182 231
2009	81 148	65 600	22 900	13 012	1 644	184 304
2010	79 736	68 451	23 014	12 811	2 208	186 220
2011	77 327	68 000	24 034	12 814	2 733	184 907
2012	75 585	69 044	23 082	12 490	3 063	183 264
2013	75 116	68,719	24 032	12 130	3 600	183 597

**PER CAPITA CONSUMPTION OF PURE ALCOHOL(c) (litres)**

2008	4.69	3.71	1.19	1.10	0.06	10.75
2009	4.68	3.78	1.32	0.75	0.09	10.63
2010	4.51	3.87	1.30	0.72	0.12	10.53
2011	4.31	3.79	1.34	0.71	0.15	10.30
2012	4.14	3.78	1.26	0.68	0.17	10.04
2013	4.04	3.70	1.29	0.65	0.19	9.88

Table  
spanner

(a) Ready to Drink (pre-mixed) beverages.

(b) See paragraphs 25 to 36 of the [Explanatory Notes](#) for information on how estimates of cider were calculated.

(c) Litres per person aged 15 years and over.

**Source(s):** Apparent Consumption of Alcohol, Australia, 2012-13

Footnotes and  
source

# Tables are appropriate for...

- » Reference data
- » Data sets with a broad range of values
- » Several measurement units
- » Large data sets

# Table example

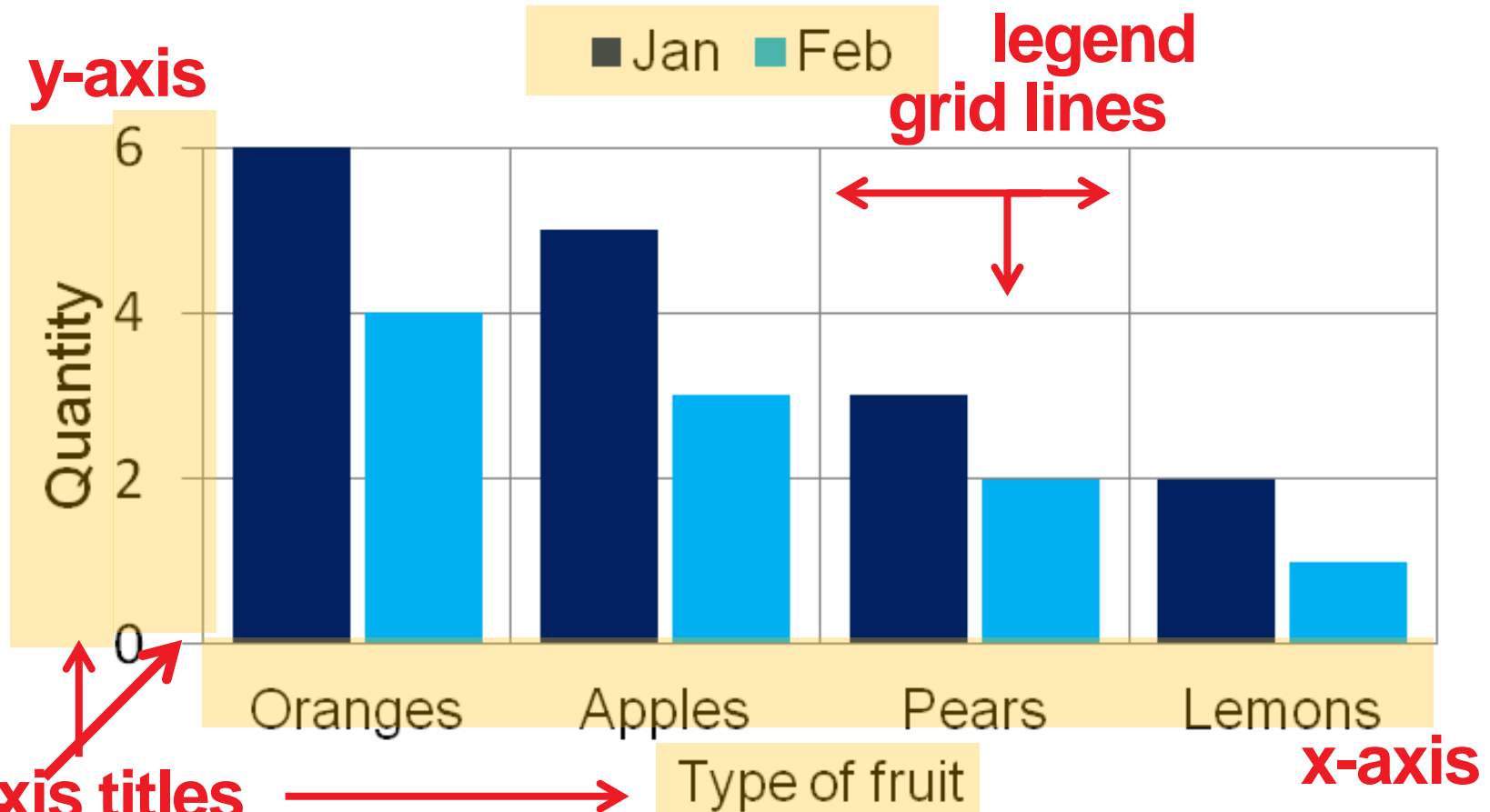
PRELIMINARY DATA		Population at end Sep qtr 2014		Change over previous year	
ACT		387,135		4,427	
NSW		7,544,529		106,410	
NT		246,349		2,842	
QLD		4,740,905		69,366	
SA		Population at end Sep qtr 2014	Change over previous year	Change over previous year	14,285
TAS		'000	'000	%	1,635
VIC	PRELIMINARY DATA				102,049
WA	NSW	7 545	106	1.4	53,714
Total Australia	Vic	5 866	102	1.8	
	QLD	4 741	69	1.5	354,575
	WA	2 589	44	2.1	
	SA	1 689	14	0.9	
	Tas	515	2	0.3	
	ACT	387	43	1.2	
	NT	246	34	1.1	
	Australia	23 581	355	1.5	

# Guidelines for editing charts

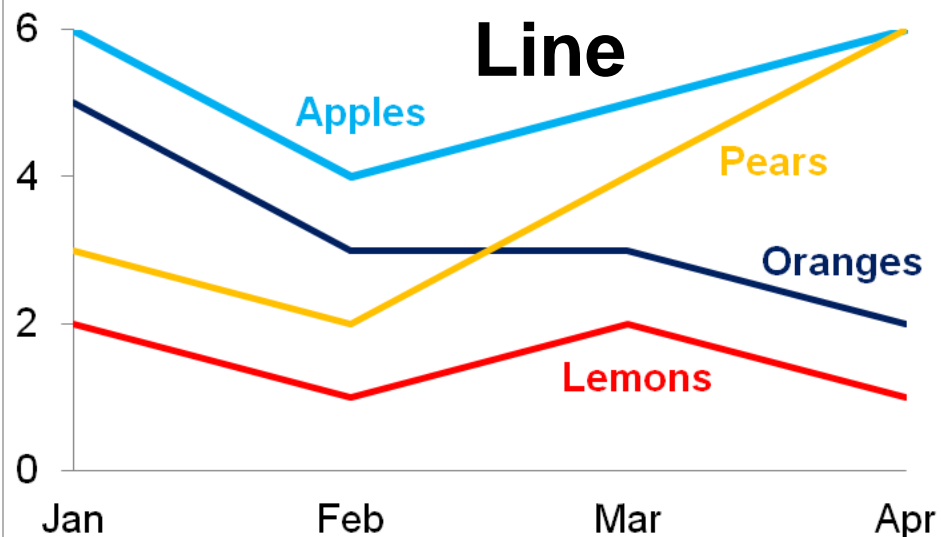
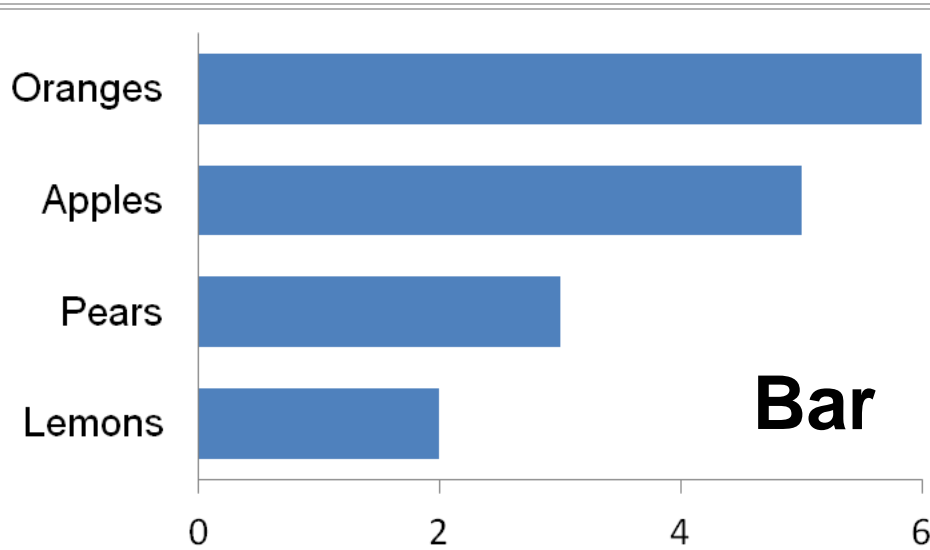
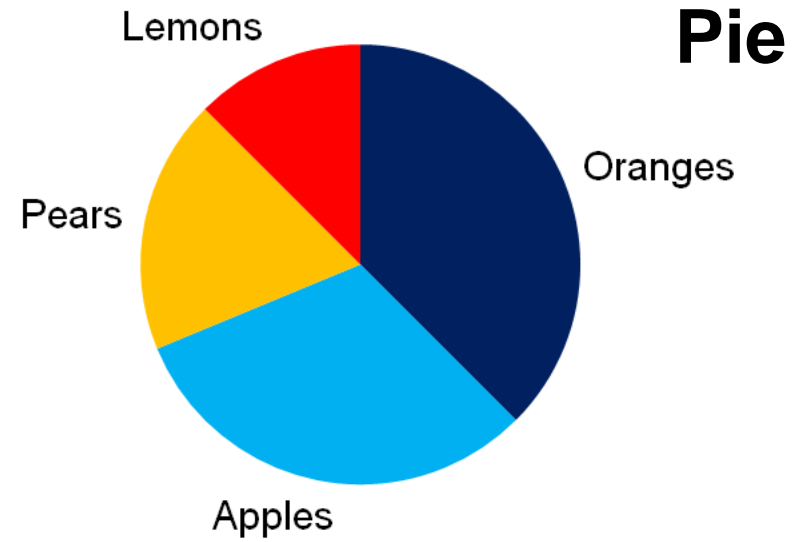
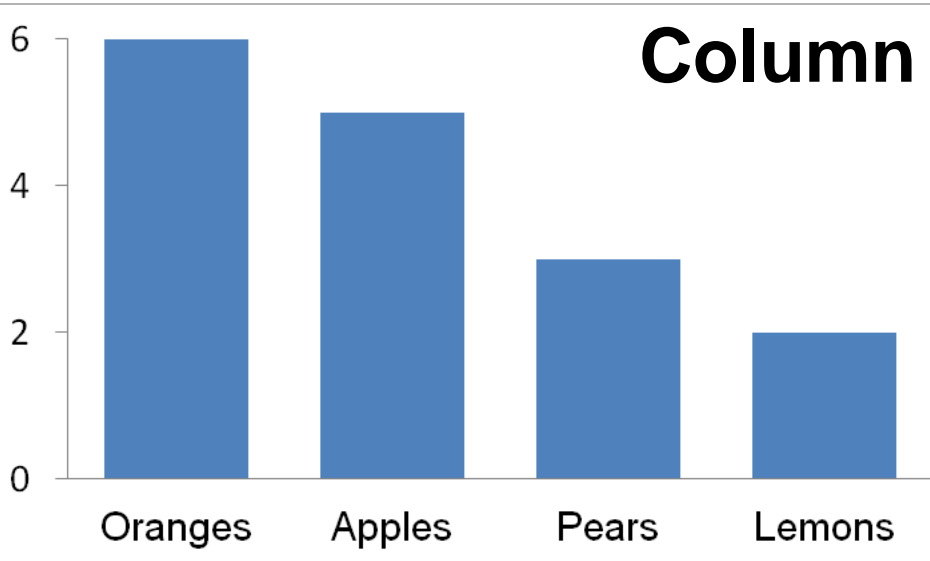


# Parts of a chart

Figure 1: Denise's monthly fruit consumption by type of fruit



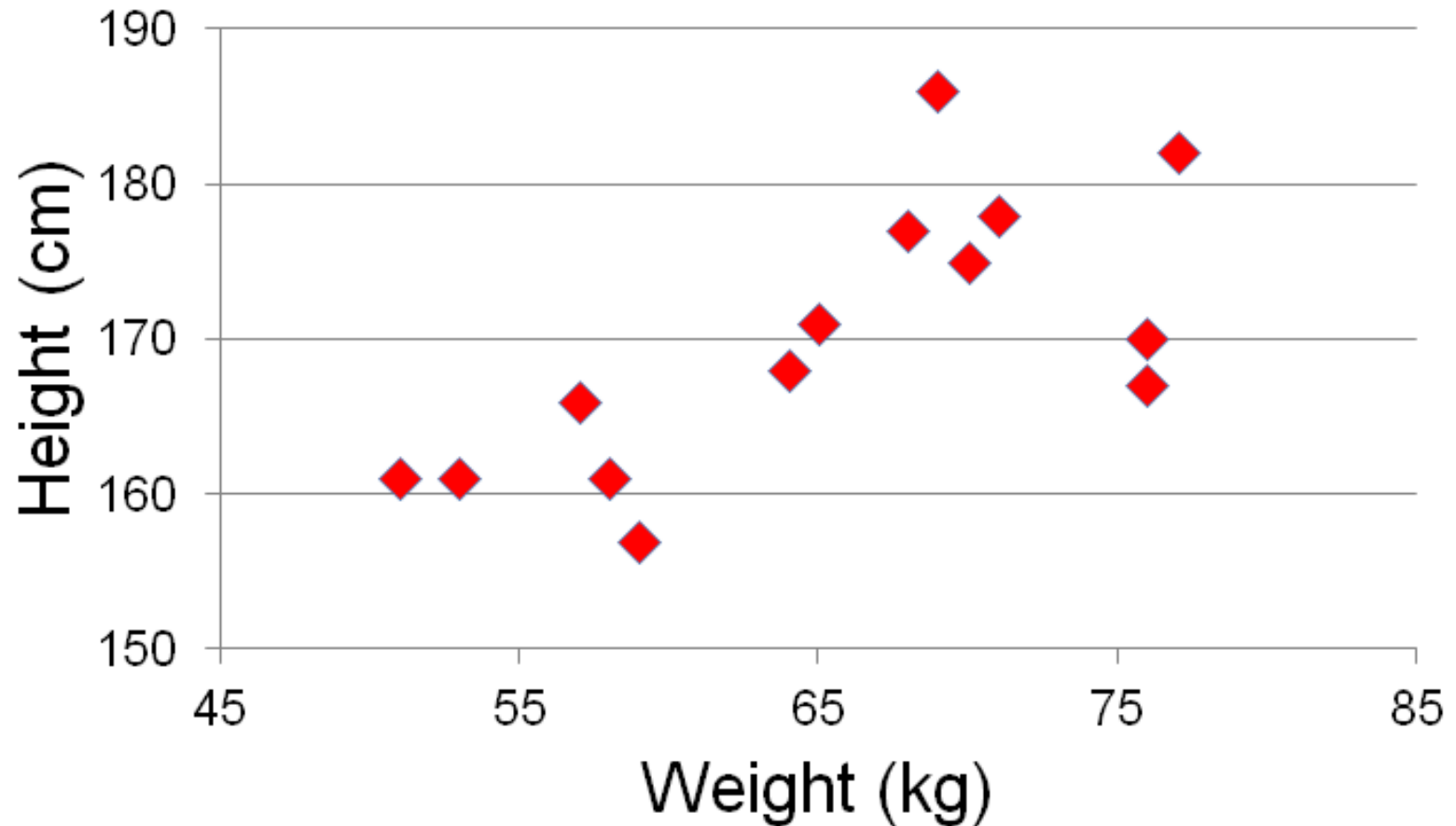
# Basic graph types



# Less common graphs

- » Radar/spider graphs
- » Scatterplots
- » Bubble charts
- » Doughnut charts
- » Area
- » Surface
- » Stock

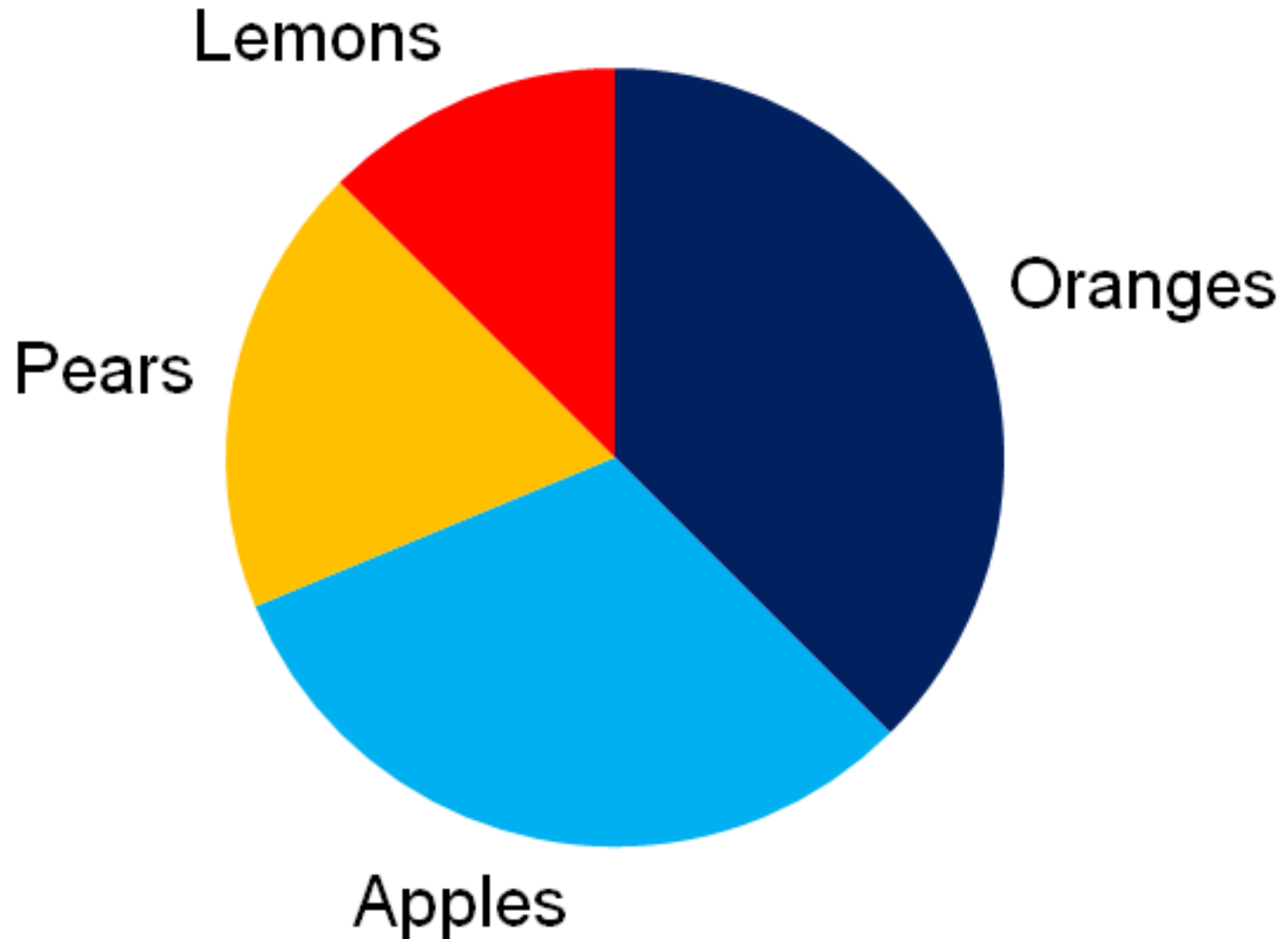
# Scatterplot



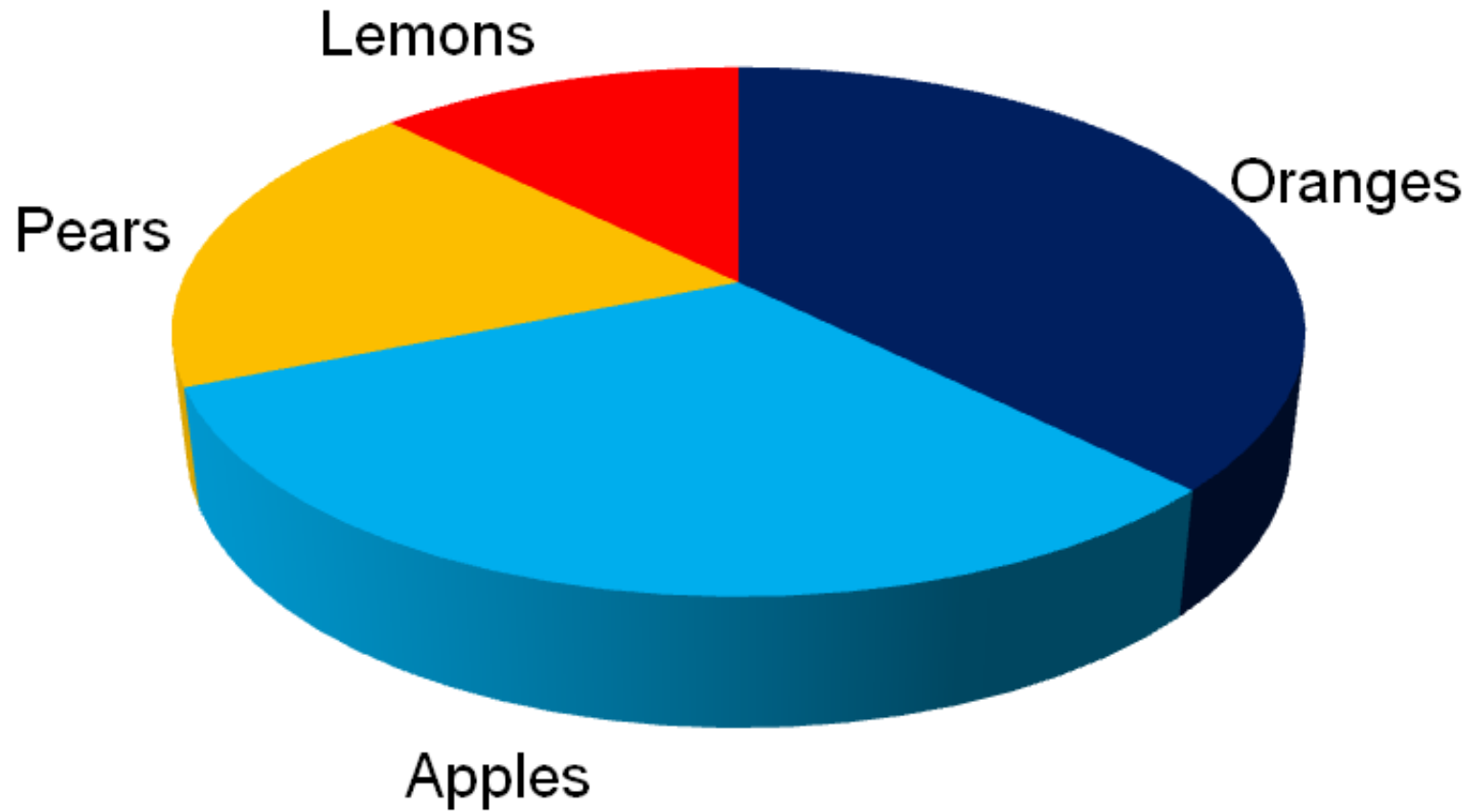
# Charts are useful for...

- » Showing trends over time
- » Showing relationships
- » Illustrating a point
- » Obfuscation

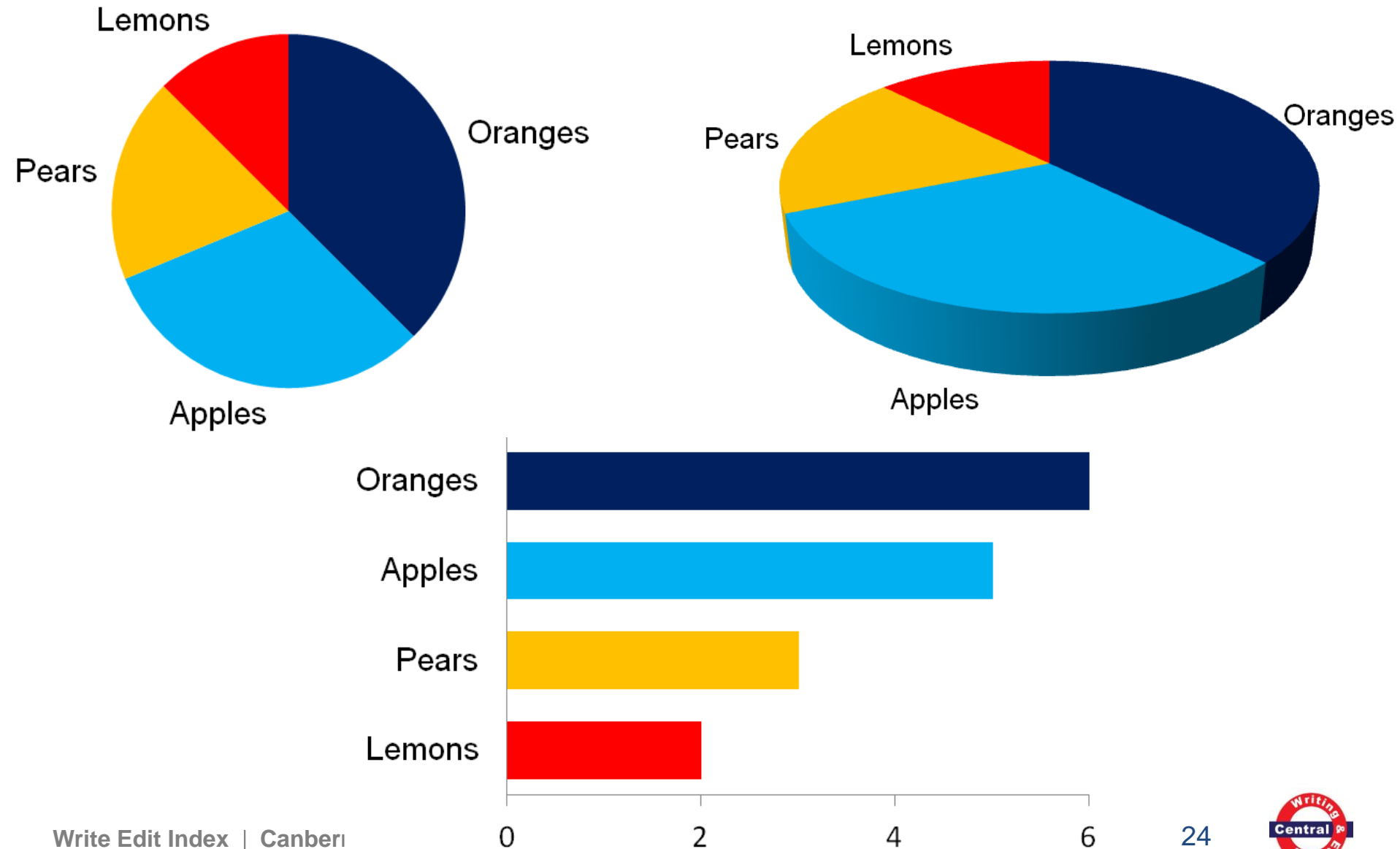
# The pie chart problem



# The 3-D problem



# Distorted perception





# Table or chart?

Data type	Table	Chart	Chart types
Parts of a whole	✓	✓	Pie, column, bar
Comparing quantities	✓	✓	Column, bar
Trends over time	✗	✓	Line, bar
Correlation of two variables	✗	✓	Scatter, bubble
Relationship of three variables	✓	✓	Bubble

# Tips for editing numbers in prose

# Be clear on the use of...

**Average: (mean, median, mode)**

**Per cent, percentage point, per cent change**

**Rate, ratio, rate of change**

**Style for measurements**

**Statistical terms: significant, sample**

# Watch for misuse of...

**greater**

**less/  
fewer**

**less  
than**

**more  
than**

**increase**

**decrease**

**'over'**

**number/  
amount**

**about/around/  
approximately**

# Editing diagrams

# Checklist

- ✓ Complete?
- ✓ Clear?
- ✓ Concise?
- ✓ Consistent?
- ✓ Accurate?

**‘The simpler you say it, the more eloquent it is.’**

**~ August Wilson**

**‘If your numbers are dull you should find some exciting numbers – not decorate the ones you’ve got.’**

**~ Edward Tufte**

# References and resources

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# Thank you

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