

### Skills Check

|              |                                     |
|--------------|-------------------------------------|
| Difficulty   | 3                                   |
| Field Issues | <input checked="" type="checkbox"/> |
| Queries      | <input checked="" type="checkbox"/> |
| Forms        | <input type="checkbox"/>            |
| Reports      | <input type="checkbox"/>            |
| Charts       | <input checked="" type="checkbox"/> |

The data in the table below displays information about a horse race.

| Horse              | Weight | Jockey          | Odds:1 | Position    |
|--------------------|--------|-----------------|--------|-------------|
| Batavia            | 58     | Peter Johnson   | 40     | 4           |
| Catalan Opening    | 58     | Damien Oliver   | 20     | 7           |
| Dodge              | 56.5   | Darren Gauci    | 20     | 8           |
| Dorismus           | 58     | Greg Hall       | 15     | Non-starter |
| Dracula            | 48.5   | Larry Cassidy   | 10     | 5           |
| Gold Guru          | 56.5   | Patrick Payne   | 12     | 6           |
| Kenwood Meldy      | 48.5   | Chris Munce     | 6      | 2           |
| Midnight and Power | 58     | Jim Cassidy     | 2      | 3           |
| Northern Drake     | 56.5   | Greg Childs     | 33     | Non-starter |
| Super Slew         | 58     | Christian Reith | 50     | 9           |
| Tycoon Lil         | 54     | Shane Dye       | 4      | 1           |

### Tasks

- Open a new Database and save as 'Races'.
- Create 5 fields for the information in the table above. Select suitable data types to display the data correctly (note the decimals and the mixed field).
- Save the table as 'Entry Data'. Enter the data.
- Sort the data by **Odds**, starting with the favourite (the one with the lowest odds).
- Write **queries** to display the following data:

| Query  | Filter in                        | Display order   | Sort by       | Query Hint       |
|--------|----------------------------------|-----------------|---------------|------------------|
| Query1 | Jockeys who weigh over 54        | Names, Weights. | Weight, DES   | >54              |
| Query2 | Horses with odds of 10-1 or less | Horses, Odds.   | Odds, ASC     | <=10             |
| Query3 | Information about Shane Dye      | All             |               | = 'Shane Dye'    |
| Query4 | Data about horses that ran       | Position, Odds. | Position, ASC | <> 'Non Starter' |

- Select all the data from **Query4** and copy into a spreadsheet. Remove the 'Wrap Text' option if necessary.
- Create a '**Scatter**' chart with '**Smooth Lines and Markers**' using all the data.
- Give the chart a **title** of 'Finishing Places'.
- With the chart selected, use the 'Axis Titles' options under the 'Layout' tab to name the x-axis '**Place**' and the y-axis '**Odds**'.
- Right-click anywhere on the blue chart line and select '**Add Trendline**'. Select 'Linear' and close the window.
- Format your spreadsheet and save as '**Races**'.

The information in the table shows the number of threatened animal species in different countries.

| Country     | Mammals | Birds | Reptiles | Fish |
|-------------|---------|-------|----------|------|
| Afghanistan | 11      | 13    | 1        | 0    |
| Albania     | 2       | 7     | 1        | 7    |
| Algeria     | 15      | 82    | 1        | 1    |
| Argentina   | 27      | 41    | 5        | 5    |
| Australia   | 58      | 45    | 37       | 37   |
| Austria     | 7       | 5     | 1        | 7    |
| Belarus     | 4       | 4     | 0        | 0    |
| Belgium     | 6       | 3     | 0        | 1    |
| Belize      | 5       | 1     | 5        | 4    |
| Bhutan      | 20      | 14    | 1        | 0    |
| Bolivia     | 24      | 27    | 3        | 0    |
| Bosnia      | 10      | 2     | 0        | 6    |
| Botswana    | 5       | 7     | 0        | 0    |

**Tasks**

- Open** a new spreadsheet and copy the data.
- Add a column** to find the total species threatened in each country (use the fill down tool).  
[=SUM(B2:E2)]
- Find the **average** Mammals, Birds, Reptiles and Fish threatened over all countries (for presentation purposes, leave an empty row before adding this calculation). [=AVERAGE(B2:B14)]
- Find the **total** Mammals, Birds, Reptiles and Fish threatened in each country (take care not to include your averages from part c in the sums). [=SUM(B2:B14)]
- It is thought that the total numbers of endangered species will **increase by 15%**. Calculate the 'Total + 15%' figure for each column (miss a row first to improve presentation). Call this new row 'Total + 15%'. [=B17+B17/100\*15] or more simply [=B17\*1.15].
- Add a row displaying the **total number** of extra species endangered under this 15% increase. Call this row 'Extra'. [=B19-B17]
- If the numbers actually **decreased by 5%**, give the new totals for each column. Call this row 'Total - 5%'.
- Format** all numbers to 0 decimal places. Bold all headings and totals. Align headings left or right over the data. Add a splash of colour. Adjust the column widths. Add a thin border around the data section and another around the calculations section.
- Select the cells A1:E1 (headings) and A6:E6 (Australian data) together, then add a **pie chart** showing the threatened species in Australia. Display the data labels.
- Add a **column chart** showing the numbers of threatened species now, and the effect of the 15% increase. Do this by selecting the first 5 cells in each of the headings row, the totals row and the 'Extra' row together and then selecting a 'Stacked Column' from the chart options.
- Save** your work as "Threatened Species".

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## Query 1

| Jockey          | Weight |
|-----------------|--------|
| Christian Reith | 58     |
| Jim Cassidy     | 58     |
| Greg Hall       | 58     |
| Damien Oliver   | 58     |
| Peter Johnson   | 58     |
| Greg Childs     | 56.5   |
| Patrick Payne   | 56.5   |
| Darren Gauci    | 56.5   |

## Query 2

| Horse              | Odds |
|--------------------|------|
| Midnight and Power | 2    |
| Tycoon Lil         | 4    |
| Kenwood Meldy      | 6    |

## Query 3

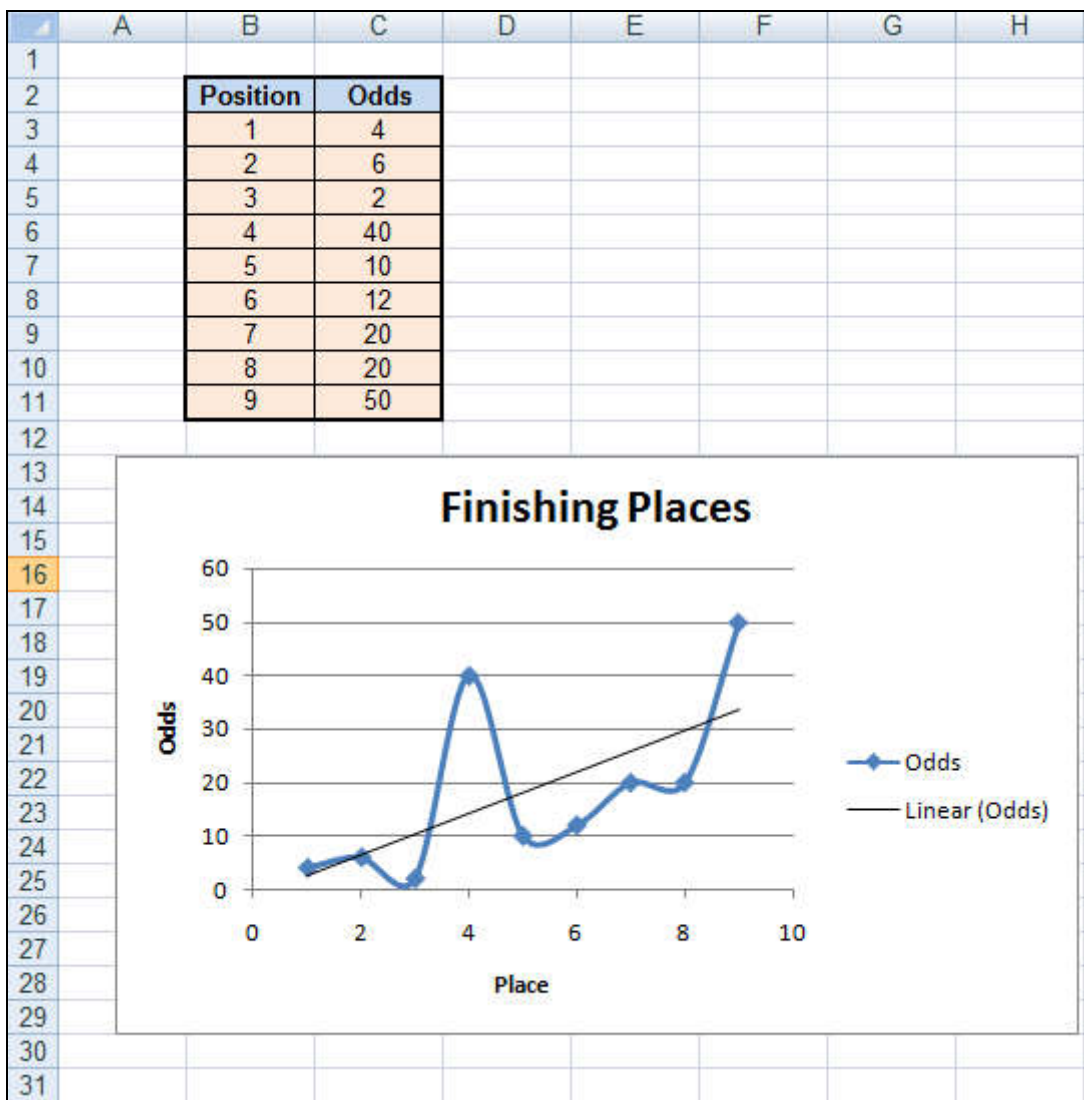
| Horse      | Weight | Jockey    | Odds | Position |
|------------|--------|-----------|------|----------|
| Tycoon Lil | 54     | Shane Dye | 4    | 1        |

## Query 4

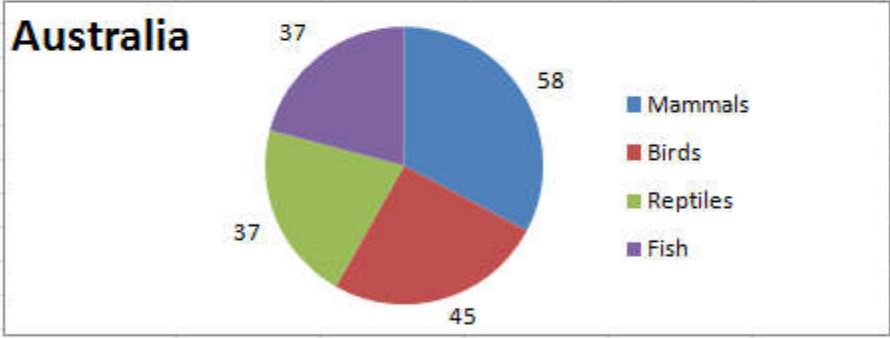
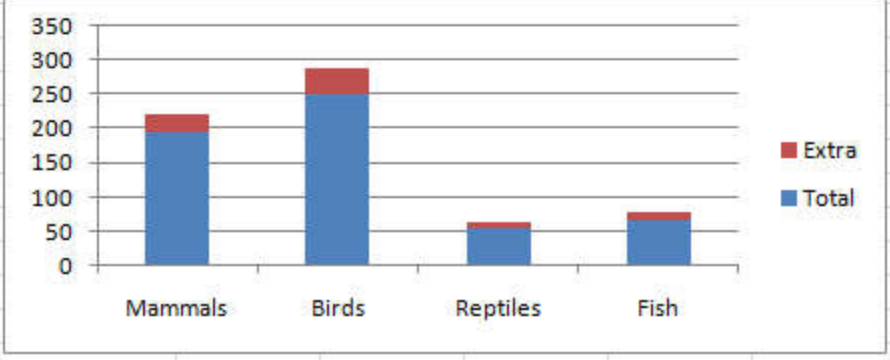
| Position | Odds |
|----------|------|
| 1        | 4    |
| 2        | 6    |
| 3        | 2    |
| 4        | 40   |
| 5        | 10   |
| 6        | 12   |
| 7        | 20   |
| 8        | 20   |
| 9        | 50   |

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## Final Spreadsheet



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|    | A  | B              | C            | D               | E           | F            |
|----|--|----------------|--------------|-----------------|-------------|--------------|
| 1  | <b>Country</b>   | <b>Mammals</b> | <b>Birds</b> | <b>Reptiles</b> | <b>Fish</b> | <b>Total</b> |
| 2  | Afghanistan  | 11             | 13           | 1               | 0           | 25           |
| 3  | Albania  | 2              | 7            | 1               | 7           | 17           |
| 4  | Algeria  | 15             | 82           | 1               | 1           | 99           |
| 5  | Argentina  | 27             | 41           | 5               | 5           | 78           |
| 6  | Australia  | 58             | 45           | 37              | 37          | 177          |
| 7  | Austria  | 7              | 5            | 1               | 7           | 20           |
| 8  | Belarus  | 4              | 4            | 0               | 0           | 8            |
| 9  | Belgium  | 6              | 3            | 0               | 1           | 10           |
| 10 | Belize   | 5              | 1            | 5               | 4           | 15           |
| 11 | Bhutan   | 20             | 14           | 1               | 0           | 35           |
| 12 | Bolivia  | 24             | 27           | 3               | 0           | 54           |
| 13 | Bosnia   | 10             | 2            | 0               | 6           | 18           |
| 14 | Botswana   | 5              | 7            | 0               | 0           | 12           |
| 15 |  |                |              |                 |             |              |
| 16 | Average  | 15             | 19           | 4               | 5           | 44           |
| 17 | Total  | 194            | 251          | 55              | 68          | 568          |
| 18 |  |                |              |                 |             |              |
| 19 | Total + 15%  | 223            | 289          | 63              | 78          | 653          |
| 20 | Extra  | 29             | 38           | 8               | 10          | 85           |
| 21 | Total - 5%   | 184            | 238          | 52              | 65          | 540          |
| 22 |  |                |              |                 |             |              |
| 23 |  |                |              |                 |             |              |
| 24 |  |                |              |                 |             |              |
| 25 |  |                |              |                 |             |              |
| 26 |  |                |              |                 |             |              |
| 27 |  |                |              |                 |             |              |
| 28 |  |                |              |                 |             |              |
| 29 |  |                |              |                 |             |              |
| 30 |  |                |              |                 |             |              |
| 31 |  |                |              |                 |             |              |
| 32 |  |                |              |                 |             |              |
| 33 |  |                |              |                 |             |              |
| 34 |  |                |              |                 |             |              |
| 35 |  |                |              |                 |             |              |
| 36 |  |                |              |                 |             |              |
| 37 |  |                |              |                 |             |              |
| 38 |  |                |              |                 |             |              |
| 39 |  |                |              |                 |             |              |
| 40 |  |                |              |                 |             |              |
| 41 |  |                |              |                 |             |              |
| 42 |  |                |              |                 |             |              |
| 43 |  |                |              |                 |             |              |
| 44 |  |                |              |                 |             |              |