## Round decimals

Look at each athlete's scorecard.
Write their results into the tables below.
Choose one event and compare the athletes' scores.

| Event: |  | Distance | Distance rounded <br> to nearest whole <br> number | Distance rounded <br> to nearest tenth |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Distance rounded <br> to nearest <br> hundredth |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Which athlete won this event? Highlight their score.
Some of the athletes think it isn't fair to round the scores. Who do you think feels this way and why?

In a different competition, Ryan's distance in Frisbee throwing was rounded to 12 metres.
What is the lowest distance he could have thrown to 3 decimal places?
What is the highest distance he could have thrown?
Have you spotted other results which the athletes would be unhappy about having rounded? Explain them.

Which level of accuracy do you think is the fairest? Why?

NOW complete the missing values table.

You will need to think carefully about the options for some of the boxes. Some of them have more than one option. Choose one.

|  | Rounded to nearest <br> whole number | Rounded to nearest <br> tenth | Rounded to nearest <br> hundredth |
| :---: | :---: | :---: | :---: |
| 3.461 |  |  |  |
| 4.372 |  |  | 3.48 |
|  |  | 8.7 |  |
|  |  |  |  |
|  |  | 42.3 |  |
|  |  | 19.9 |  |
|  |  |  |  |

Which boxes did you have to think most about? What other numbers could you have put instead?
Choose one number to investigate. How many other options can you find?

