## MATC9 Ch4.4 Key Concepts 2 Median of a Data Set Worked Example

Example: Flavio took a survey to find the hourly rates paid to his classmates at their part-time jobs. The results are shown. Find the median of these data.

Solution: Arrange the rates in order. Since there are 12 data, take the mean of the 6th and 7th.

| Rate $(\mathbf{\$} / \mathbf{h})$ |  |  |
| :---: | :---: | :---: |
| 8 | 9 | 8 |
| 12 | 11 | 20 |
| 10 | 8 | 9 |
| 8 | 9 | 8 |

Median $=\frac{9+9}{2}$

$$
=\$ 9 / \mathrm{h}
$$

| 8 |
| :---: |
| 8 |
| 8 |
| 8 |
| 8 |
| 9 |
| 9 |
| 9 |
| 10 |
| 11 |
| 12 |
| 20 |

## Practice:

| $\operatorname{Cost}(\$ / \mathbf{)})$ |  |  |
| :---: | :---: | :---: |
| 1.87 | 1.86 | 1.86 |
| 1.89 | 1.88 | 2.25 |
| 1.85 | 1.87 | 1.88 |
| 1.87 | 1.86 | 1.86 |

2. Lars took a survey to find how far each of his classmates lived from the school, rounded to the nearest kilometre. The results are shown. Find the median of these data.

| Distance (km) |  |  |
| :---: | :---: | :---: |
| 2 | 3 | 3 |
| 2 | 3 | 6 |
| 6 | 5 | 2 |
| 3 | 1 | 12 |

Answers: 1. \$1.87/L. 2. 3 km.

