Focus: Addition and subtraction, place value.
Resources: None.
Questions/instructions:
A trip meter on a speedo shows how many
kilometres a car travels.

1. Write what the trip meter will show if the car travels one more kilometre than:
[The trip meter and response blank was presented like this:]
2. Write what the trip meter will show if the car travels ten more kilometres than:
3. Write what the trip meter will show if the car travels one hundred more kilometres than: $\quad \begin{array}{ll}1 / 9 / 9 \mid 6 ~ 2 / 0 / 9 / 6 ~ & 45\end{array}$
4. Write what the trip will show if the car travels one thousand more kilometres than:

| 1 | 9 | 9 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

5. Write what the trip meter showed one kilometre before this:

3/4|0|2 3|4|0|1 3478
6. Write what the trip meter showed ten kilometres before this:

| 3 | 4 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 3 | 9 | 2 |$\quad 7 \quad 52$

7. Write what the trip meter showed one hundred kilometres before this:

| $3 / 4 / 0 \mid 2$ | $3 / 0 \mid 2$ |
| :---: | :---: | :---: | :---: | :---: |

8. Write what the trip meter showed one thousand kilometres before this:

| $3 / 4 / 0 \mid 2$ | $2 / 4 / 0 \mid 2$ | 21 |
| :--- | :--- | :--- | :--- |

Total score: | 8 | 2 | 26 |  |
| ---: | ---: | ---: | ---: |
| $6-7$ | 7 | 31 |  |
|  | $4-5$ | 10 | 16 |
| $2-3$ | 21 | 12 |  |
|  | $0-1$ | 60 | 15 |

## Commentary

Most year 4 students showed a low level of understanding of place value, and very few succeeded when renaming was required. About 60 percent of year 8 students gave correct answers to 6 or more of the 8 components.

