| Approach: | One to one | Year: | 8 |
|---|---|---|---|
| Focus: | Number strategy | | |
| Resources: | 4 problem cards, recording book | | |

NEMP
Access
Task

## Questions / instructions:

| | % responses y8 |
|---|---|

Follow the number problems as I read them to you. You can write in the recording book to help you work them out if you want.

**Hand recording book and pencil to the student.**

**Hand and read card 1 to the student.**

| | | | |
|---|---|---|---|
| 1. What is your answer to this problem? | ✔ | $42 | 34 |
| | ✗ | $30 | [61] |

2. Tell me how you worked it out.

> Tim and Jay each have $12 and Sharon has $18. How much money have they got altogether?

| | |
|---|---|
| combination of methods | 10 |
| addition | 88 |
| subtraction | 0 |
| multiplication | 1 |
| division | 1 |
| strategy showing how numbers were combined | 43 |

**Hand and read card 2 to the student.**

| | | |
|---|---|---|
| 3. What is your answer to this problem? | $72 | 73 |

4. Tell me how you worked it out.

> Josh earns $18 a week cleaning cars after school. How much will he earn in 4 weeks?

| | |
|---|---|
| combination of methods | 21 |
| addition | 18 |
| subtraction | 0 |
| multiplication | 54 |
| division | 0 |
| strategy showing how numbers were combined | 33 |

**Hand and read card 3 to the student.**

| | | |
|---|---|---|
| 5. What is your answer to this problem? | 12 | 61 |

6. Tell me how you worked it out.

> In a fruit salad there are 3 apples for every 4 oranges. If a fruit salad has 9 apples, how many oranges are needed?

| | |
|---|---|
| $3 \times 3 = 9$ and $4 \times 3 = 12$ | 37 |
| $9 \div 3 = 3$ and $4 \times 3 = 12$ | 9 |
| any other valid strategy | 14 |

**Hand and read card 4 to the student.**

| | | |
|---|---|---|
| 7. What is your answer to this problem? | 14 | 11 |

8. Tell me how you worked it out.

> It takes 10 pizzas to feed 15 people. How many pizzas does it take to feed 21 people?

| | |
|---|---|
| 10 is $\frac{2}{3}$ of 15 and $\frac{2}{3} \times 21 = 14$ | 3 |
| any other valid strategy | 7 |

| **Total score:** | | |
|---|---|---|
| | 5 | 4 |
| | 4 | 23 |
| | 3 | 32 |
| | 2 | 26 |
| | 1 | 13 |
| | 0 | 1 |

## Commentary:

Students were able to complete the simpler problems but had difficulty with problems involving ratios or subtlety in the framing of the problem.