## =Mathematics Hub

## Teacher guide: Assessment task: Multiplicative number problems

1. The answers $b$ and $c$ are correct.
a) $24 \times 4=$ ?
b) $4 x ?=24$
c) $24 \div 4=$ ?
d) $4 \div 24=$ ?
2. When describing the relationship, students should indicate that division is the inverse of multiplication. They may also use the terms 'opposite' or 'reverse' to describe the relationship. Some students may use the term 'matching' but you would need further explanation to see if they fully understood the inverse nature of the relationship.
3. Represent the problem using an area model.

The model should look something like this. 63 divided into 9 equal parts. Each part is equivalent. Each part is equal to 7.

| 63 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |

Equations include any of the four facts that make up the family of facts.
$7 \times 9=63,9 \times 7=63,63 \div 9=7,63 \div 7=9$
The equation $63 \div 9=7$ describes the problem better than $63 \div 7=9$
A student may have put an equation in the form of $63 \div ?=9$, which may need further discussion to see if they know the answer is 7.
4. Choose one of the following numbers. Write the fact family for that number.

18 factors 1 and 18, 2 and 9,3 and 6 (and related family of facts)
32 factors 1 and 32, 2 and 16, 4 and 8 (and related family of facts)
56 factors 1 and 56, 7 and 8 (and related family of facts)
96 factors 1 and 96,2 and 48,3 and 32,4 and 24,6 and 16,8 and 12 (and related family of facts)

