## Possible Solutions

The model below represents the length and width of a rectangular exercise mat. What is the area of this mat in square meters? Explain how you determined the solution.
a) I finished covering the mat with square meters. I counted the units and got 54. The area of the mat is 54 square meters.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
| 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 |

b) I finished covering the mat with square meters making sure there were no overlaps or gaps. I counted the number of square meters in one row and there were 9 . I counted the number of rows and there were 6 . I used repeated addition to find the total number of square meters.

$$
9+9+9+9+9+9=54
$$

The area of the mat is 54 square meters.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

c) I finished covering the mat with square meters. I counted the number of square meters in one row and there were 9 . I skip counted by 9 for each row to find the total number of square meters.

$$
9,18,27,36,45,54
$$

The area of the mat is 54 square meters.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  |  |  |  |  |  | 18 |
|  |  |  |  |  |  |  |  | 27 |
|  |  |  |  |  |  |  |  | 36 |
|  |  |  |  |  |  |  |  | 45 |
|  |  |  |  |  |  |  |  | 54 |

