Name: Class:

Complete an increasing number sequence


Complete the following sequence.
a. $3,6,12,21,33,48$,
b. $1,12,25$, $\qquad$ 57, 76,

## Solution

## mathskills kids

Name:
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Complete an increasing number sequence


## Complete the following sequence.

a. $3,6,12,21,33,48$, $\qquad$ $\square$ Let's first find the pattern.
Going from 3 to 6 , we see that 3 was added
Going from 6 to 12, we see that 6 was added and so on
So, looking at the patterns of numbers that we added to the sequence each time, we're adding by plus 3


Now, lets complete the sequence.

| 3 <br> + |  | 6 |  | 12 |  | ${ }_{1} 1$ |  | 33 |  | 48 |  | 66 |  | 87 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $+3$ |  | $+{ }_{+}^{+6}$ |  | $\stackrel{+}{+}$ |  | ${ }_{+}^{+12}$ |  | $\stackrel{+15}{+}$ |  | $\stackrel{+18}{+}$ |  | $\stackrel{+21}{+}$ |  |
|  |  | +3 |  | +3 |  | +3 |  | +3 |  | +3 |  | +3 |  |  |

So, the complete sequence is $3,6,12,21,33,48,66,87$
b. $1,12,25$, $\qquad$ 57, 76, $\qquad$
$\qquad$
Let's first find the pattern.
Going from 1 to 12, we see that 11 was added
Going from 12 to 25 , we see that 13 was added and so on
So, looking at the patterns of numbers that we added to the sequence
each time, we're adding by plus 2


Now, lets complete the sequence.

| 1 |  | $\stackrel{12}{1}$ |  | 25 |  | 40 |  | 57 |  | 76 |  | 97 |  | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | + |  | ${ }_{+}^{+13}$ |  | ${ }_{+}^{+15}$ |  | ${ }_{+17}$ |  | $\stackrel{+19}{+}$ |  | ${ }_{+}+2$ |  | ${ }^{+23}$ |  |
|  |  | +2 |  | +2 |  | +2 |  | +2 |  | +2 |  | +2 |  |  |

