The numbers below follow a pattern.

4, 5, 8, 13, 20, 29, \_\_\_\_, \_\_\_\_...

What are the seventh and eighth numbers in the pattern?

Write an equation that represents the relationship of x to y shown in the table below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| X | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Y | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Find the missing value in the table below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| X | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Y | 1 | 4 | 7 | 10 | 13 |  | 19 |

The first three steps in a pattern are shown below.

• •

• •• ••

••

Write a rule that can be used to find the number of dots in any step of the pattern. How many dots will there be in the 100th step?

What is the rule for the pattern below?

102, 100, 50, 48, 24, 22,…

What are the next two terms in this pattern?

256, 64, 16, 4, …

Write an equation that represents the relationship of x to y in this table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| X | 0 | 1 | 2 | 3 | 4 | 5 |
| Y | 2 | 6 | 10 | 14 | 18 | 22 |

Write a rule that applies to the table below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| X | -3 | -1 | 1 | 3 | 5 |
| Y | -11 | -5 | 1 | 7 | 13 |

Write an equation that represents the relationship of x to y in this table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| X | 0 | 1 | 2 | 3 | 4 | 5 |
| Y | 1 | 6 | 11 | 16 | 21 | 26 |

Which number is missing from the table below?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| X | 2 | 3 | 4 | 5 | 6 |
| Y | 7 | 9 |  | 13 | 15 |

If Shana works 2 hours, she earns $56. If she works 3 hours, she earns $84. If she works 4 hours, she earns $112. If she works 5 hours, she earns $140.

Create a table to show the relationship between number of hours worked, *h*, and the amount of money earned, *d*.

Write an equation that represents the relationship between *h* and *d*.

How much will Shana earn if she works 9 hours? Show your work.