2.3 Translating Between Tables & Expressions

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Sep 23-10:45 AM

Write an expression for the missing value in the table.

Spike's Age	*Rusty's Age*
2	6
3	7
4	8
a	*a* + 4

Rusty's age is Spike's age plus 4

2 + 4 = 6

3 + 4 = 7

4 + 4 = 8

a + 4

When Spike's age is *a*, Rusty's age is *a* + 4.

Feb 24-8:39 AM

Write an expression for the missing value in the table.

Reilly's Age	Ashley's Age
9	11
10	12
11	13
12	14
n	*n* + 2

9+2
10+2
11+2
12+2

Feb 24-8:44 AM

Write an expression for the missing value in the table.

Ty's Age	*Rich's Age*
1	7
2	14
3	21
a	7(a) or 7a

1·7
2·7
3·7
a·7

Feb 24-8:40 AM

Write an expression for the missing value in the table.

Eggs	Dozens
12	1
24	2
36	3
48	4
e	*e* ÷ 12 or $\frac{e}{12}$

12÷12
24÷12
36÷12
48÷12

Feb 24-8:45 AM

Write an expression for the sequence in the table.

Position	1	2	3	4	*n*
Value	7	10	13	16	3n + 4

+1 +1 +1

+3 +3 +3

Look for a relationship between the positions and the values of the terms in the sequence. Use guess and check.

Guess 7*n*

Check by substituting 2.

7 • 2 does not equal 10.

Guess 3*n* + 4

Check by substituting 2.

3 • 2 + 4 = 10.

The expression 3n + 4 works for the entire sequence.

3 • 1 + 4 = 7, 3 • 2 + 4 = 10, 3 • 3 + 4 = 13, 3 • 4 + 4 = 16

The expression for the sequence is 3*n* + 4.

Feb 24-8:41 AM

Write an expression for the sequence in the table.

Position	1	2	3	4	*n*
Value	7	12	17	22	

+1 +1 +1 +5 +5 +5

5(1)+2=7 5(3)+2=17 5(2)+2=12 5(4)+2=22

5n+2

Feb 24-8:41 AM

A triangle has a base of 6 inches. The table shows the area of the triangle for different heights. Write an expression that can be used to find the area of the triangle when its height is *h* inches.

Base (in.)	Height (in.)	Area (in²)
6	1	3
6	2	6
6	3	9
6	*h*	

·3 ·3

3h h·3 3(h)

6h ÷2

$\frac{6h}{2} = 3h$

Feb 24-8:41 AM

A triangle has a base of 4 inches. The table shows the area of the triangle for different heights. Write an expression that can be used to find the area of the triangle when its height is *h* inches.

Base (in.)	Height (in.)	Area (in²)
4	3	6
4	4	8
4	5	10
4	*h*	

3·2 4·2 5·2 2h

h·2 2·h

Feb 24-8:42 AM

Write an expression for the missing value in the table.

Scott's Age	*Ray's Age*
11	15
12	16
13	17
x	

11+4 12+4 13+4 X+4

Feb 24-8:42 AM

Write an expression for the sequence in the table.

Position	1	2	3	*n*
Value	8	16	24	

·8 ·8 ·8 8n

+8 +8

Feb 24-8:43 AM

A rectangle has a width of 7 inches. The table shows the area of the rectangle for different lengths. Write an expression that can be used to find the area of the rectangle when its length is *l* inches.

Width (in.)	Length (in.)	Area (in²)
7	4	28
7	5	35
7	6	42
7	*l*	

·7 ·7

7l 7(l) l·7 7·l

Feb 24-8:43 AM