

Patterns and Equations Unit Test Review

Dear Parent,

This review package has been developed to help prepare your child for the unit test. Please complete it with your child, or at least look over it once they have completed it.

Thank you,

Mr. O

PATTERNS

3, 6, 9, 12, 15, 18, ...

Identify the pattern rule.

Start at 3, +3 each time.

Now you try:

Complete the pattern.

4, _____, 12, _____, 20, ...

Identify the pattern rule.

Some patterns are more complicated. Try this one:

Complete the pattern: 2, 3, 5, 8, 12, 17, _____, _____, _____, ...

Pattern Rule: _____

Patterns and Expressions

Complete the table.

Pencil Cases	Pencils
1	6
2	12
3	18
4	24
5	30

Now you try:

Figure Number	Number of Dots
1	5
2	6
3	7
4	
5	

Write an expression for the table.

_____ $p \times 6$ _____

Extend the pattern in the tables above for the next 3 terms.

_____ 36, 42, 48 _____

Complete the table to help figure out this question.

Wanda makes \$5.00 an hour for babysitting. Complete the table to show how much money she would make if the pattern continues.

Number of Hours	Amount of Money Earned in \$
2	
4	
6	
8	
10	

How much money would Wanda earn if she babysat for 13 hours?

Equations

Write an Equation for this problem.

Glen loves cherries. He picked 97 pounds of cherries in one day. If Glen brought home 89 pounds of cherries, then how many did he eat?

 $97 - 89 = c$ or $c + 89 = 97$ or $89 = 97 - c$

Solve the problem using your equation.

$$97 - 89 = c$$
$$8 = c$$

$$c + 89 = 97$$
$$8 + 89 = 97$$
$$\text{so } c = 8$$

$$89 = 97 - c$$
$$89 = 97 - 8$$
$$\text{so } c = 8$$

Students can figure out the answer to the question using a variety of equations. The above solutions show 3 different ways to figure out the problem.

Now you try:

Connie loves to read. She is currently reading a book that has 568 pages. She has 139 pages left to read. How many pages has Connie already read?

Write at least 2 equations for this problem.

Use one of the equations to solve the problem. Show your work and answer in a sentence.

Solve these equations. (You only have to use one of the strategies)

$$16 + z = 22$$

or

$$16 + z = 22$$

$$16 + 6 = 22$$

$$z = 22 - 16$$

$$\text{so } z = 6$$

$$z = 6$$

Now you try:

$$7 = 28 - m$$

$$k \div 6 = 4$$

$$t = 5 \times 7$$

$$r + 12 = 21$$

Write a word problem for this equation.

$$g \div 5 = 3$$

Mr. B. had a certain number of pieces of gum. He shared them equally with 5 students. Each student received 3 pieces of gum. How many pieces of gum did Mr. B. start with?

Now you try:

$$b = 4 \times 5$$