

Algebra Skill Sheet



1. Find the rule and continue geometric and numerical patterns.

pattern

$$\underline{1} + 4 \quad \underline{5} + 4 \quad \underline{9} + 4 \quad \underline{13}$$

The pattern is all odd numbers.
It follows the rule "add 4."

A repeating or growing sequence. An ordered set of numbers arranged according to a rule.

pattern



A repeating or growing sequence or design. An ordered set of numbers or shapes arranged according to a rule.

2. Identify the missing symbol (+, -, x, ÷, <, >) that makes a number sentence true.

$$14 \square 7 = 21$$

$$8 \times 7 \square 9 \times 10$$

$$32 \square 8 = 4$$

Identify the missing number that makes a number sentence true.

$$21 \div \square = 3$$

$$2 \times 6 = 3 \times \square$$

$$16 + 22 = \square$$

3. Find the missing elements in a function table and determine the rule.

Find the rule and complete the table.

In	Out
4	2
6	3
<input type="text"/>	4
12	<input type="text"/>
16	8
18	9

The rule is to divide by 2.

$$4 \div 2 = 2$$

$$6 \div 2 = 3$$

$$? \div 2 = 4$$

$$12 \div 2 = ?$$

$$16 \div 2 = 8$$

$$18 \div 2 = 9$$

4. Write a number sentence, equation, or expression based on a word problem.

There are 12 golf balls in a bucket. There are x white golf balls and 5 orange golf balls.

Equation

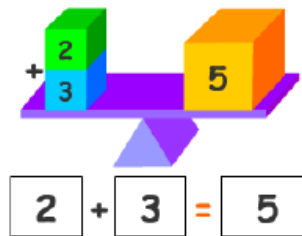
$$x + 5 = 12$$

$x = 7$ white golf balls

variable $5 \times b = 10$
 b is a variable worth 2.

A letter or symbol that represents a number.

equation



A mathematical sentence with an equal sign. The amount on one side of the equal sign has the same value as the amount on the other side.

expression $n + 4$

A mathematical phrase without an equal sign.

***These are the basic understandings that your child should be learning in Algebra. However, they will need to apply these skills to more challenging problems, as well as in word problems.*