



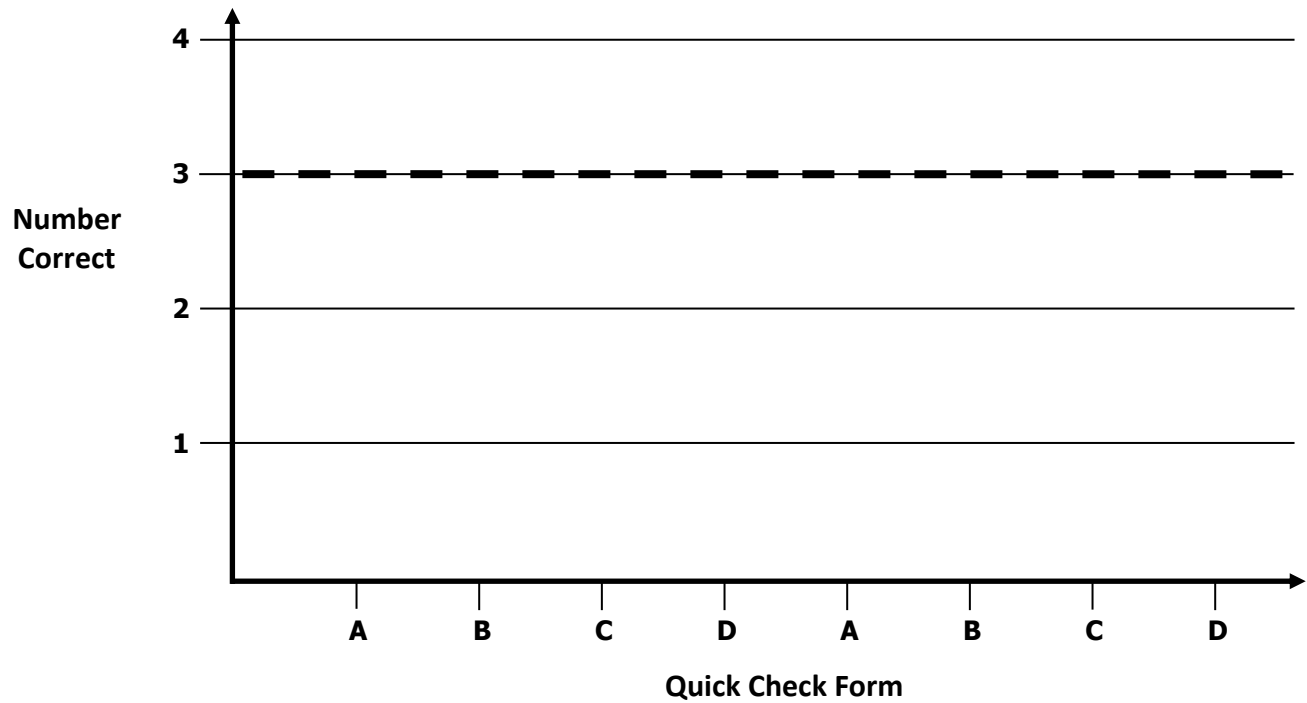
# Algebra 2 Growth Chart

Readiness Standard 4 - F.LE.1

Name \_\_\_\_\_

**Learning Target:** I will determine if a function is linear or non-linear.

**Goal:** 3 out of 4 correct



Intervention	Date	Score



# Quick Check – Form A

Readiness Standard 4 – F.LE.1

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will determine if a function is linear or non-linear. (Work time: 4 minutes)

1. Given the function provided in the table, circle the answer choice that makes the statement true.

$x$	0	1	2	3	5
$f(x)$	1	3	5	7	9

“The function represented in the table is \_\_\_\_\_.”

- linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate

2. Given the function provided in the table, circle the answer choice that makes the statement true.

$x$	-1	0	1	2	4
$g(x)$	6	3	0	-3	-9

“The function represented in the table is \_\_\_\_\_.”

- linear because the values of  $x$  and  $g(x)$  always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate
- non-linear because the values of  $x$  and  $g(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate

3. Circle all of the linear functions.

$f(x) = x^3 + 4$        $g(x) = 3x + 4$        $h(x) = 3^x + 4$        $k(x) = x$

4. Circle all of the non-linear functions.

$p(x) = x^2 + 7$        $q(x) = 2x + 7$        $r(x) = 2^x + 7$        $t(x) = x$



# Quick Check – Form B

Readiness Standard 4 – F.LE.1

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will determine if a function is linear or non-linear. (Work time: 4 minutes)

1. Given the function of  $f(x)$  provided in the table, circle the answer choice that makes the statement true.

$x$	0	1	2	3	5
$f(x)$	8	6	4	2	0

“The function represented in the table is \_\_\_\_\_.”

- linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate
- linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  always change at a constant rate

2. Given the function of  $f(x)$  provided in the table, circle the answer choice that makes the statement true.

$x$	-1	0	1	2	4
$f(x)$	2	4	6	8	10

“The function represented in the table is \_\_\_\_\_.”

- non-linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate
- non-linear because the values of  $x$  and  $g(x)$  always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  always change at a constant rate

3. Circle all of the linear functions.

$$f(x) = 4x + 5 \quad g(x) = x^4 + 5 \quad h(x) = x \quad k(x) = 4^x + 5$$

4. Circle all of the non-linear functions.

$$p(x) = x^2 + 3 \quad q(x) = 2x + 3 \quad r(x) = 2^x + 3 \quad t(x) = x$$



# Quick Check – Form C

Readiness Standard 4 – F.LE.1

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will determine if a function is linear or non-linear. (Work time: 4 minutes)

1. Given the function of  $f(x)$  provided in the table, circle the answer choice that makes the statement true.

$x$	0	1	2	3	5
$f(x)$	-4	0	4	8	16

“The function represented in the table is \_\_\_\_\_.”

- linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate
- linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate

2. Given the function of  $f(x)$  provided in the table, circle the answer choice that makes the statement true.

$x$	-2	-1	0	1	4
$f(x)$	-4	0	4	8	20

“The function represented in the table is \_\_\_\_\_.”

- non-linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate
- non-linear because the values of  $x$  and  $g(x)$  always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  always change at a constant rate

3. Circle all of the linear functions.

$$f(x) = x^3 + 4$$

$$g(x) = 3x + 4$$

$$h(x) = x$$

$$k(x) = 3^x + 4$$

4. Circle all of the non-linear functions.

$$p(x) = 2x + 7$$

$$q(x) = x$$

$$r(x) = x^2 + 7$$

$$t(x) = 2^x + 7$$



# Quick Check – Form D

Readiness Standard 4 – F.LE.1

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will determine if a function is linear or non-linear. (Work time: 4 minutes)

1. Given the function of  $f(x)$  provided in the table, circle the answer choice that makes the statement true.

$x$	-1	0	1	2	4
$f(x)$	-5	-3	-1	1	3

“The function represented in the table is \_\_\_\_\_.”

- non-linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate
- linear because the values of  $x$  and  $f(x)$  always change at a constant rate
- linear because the values of  $x$  and  $f(x)$  do not always change at a constant rate

2. Given the function of  $f(x)$  provided in the table, circle the answer choice that makes the statement true.

$x$	0	1	2	3	5
$f(x)$	5	3	1	-1	-5

“The function represented in the table is \_\_\_\_\_.”

- non-linear because the values of  $x$  and  $g(x)$  always change at a constant rate
- non-linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  always change at a constant rate
- linear because the values of  $x$  and  $g(x)$  do not always change at a constant rate

3. Circle all of the linear functions.

$$f(x) = 4^x + 5$$

$$g(x) = 4x$$

$$h(x) = x^4 + 5$$

$$k(x) = x + 4$$

4. Circle all of the non-linear functions.

$$p(x) = x^2 + 6$$

$$q(x) = 2x + 6$$

$$r(x) = x + 6$$

$$t(x) = 2^x$$