

Functions Quiz

Identify whether the following relations are functions or not.

①	<table><tr><th>x</th><th>y</th></tr><tr><td>-2</td><td>1</td></tr><tr><td>-1</td><td>-1</td></tr><tr><td>0</td><td>1</td></tr><tr><td>-1</td><td>-1</td></tr><tr><td>-2</td><td>1</td></tr></table>	x	y	-2	1	-1	-1	0	1	-1	-1	-2	1	Circle one ②	<table><tr><th>x</th><th>y</th></tr><tr><td>5</td><td>0</td></tr><tr><td>2</td><td>-3</td></tr><tr><td>-6</td><td>1</td></tr><tr><td>3</td><td>-3</td></tr><tr><td>0</td><td>4</td></tr></table>	x	y	5	0	2	-3	-6	1	3	-3	0	4	Circle one ③	<table><tr><th>x</th><th>y</th></tr><tr><td>6</td><td>2</td></tr><tr><td>1</td><td>-1</td></tr><tr><td>0</td><td>3</td></tr><tr><td>-1</td><td>6</td></tr><tr><td>-6</td><td>-2</td></tr></table>	x	y	6	2	1	-1	0	3	-1	6	-6	-2	Circle one
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	yes no		yes no		yes no																																					

Explanation: ①
②
③

Evaluate the following functions:

$$f(x) = 4x - 2 \quad g(x) = 5 - x \quad h(x) = x^2$$

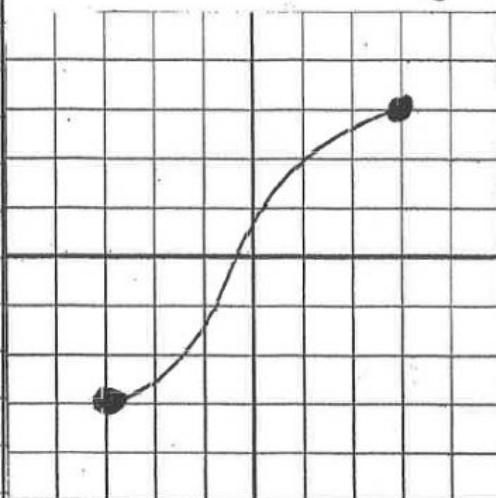
④ $f(3) =$

⑤ $g(-2) =$

⑥ $h(-4) =$

Identify the domain and range of the following relations:

⑦



⑧

$(-2, 3)$ $(-1, 4)$
 $(-1, 5)$ $(2, 6)$
 $(3, 6)$ $(4, 7)$

Domain: _____
 Range: _____

domain: _____
 range: _____

Identify the following functions as linear or exponential:

⑨

$$2 + y = 4x$$

L E

$$⑩ y = 2(4)^x$$

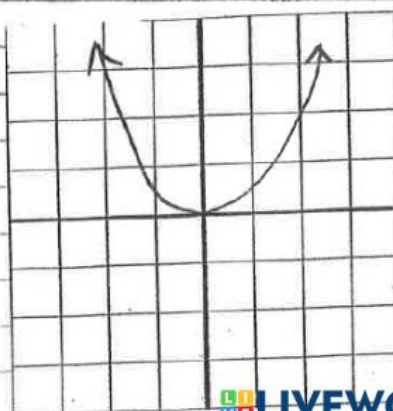
L E

⑪

x	2	3	4	5	6
y	32	16	-8	-4	-2

L E

⑫



L

E

Find the inverse of the functions:
★ remember to use inverse function notation★

(13) $f(x) = 2x - 1$ (14) $f(x) = \frac{2}{3}x + 6$

Evaluate the exponential functions
for the given x values

(15) $f(x) = 3(2)^x$ $x = -2, 0, 1$

(16) $f(x) = \frac{1}{2}(3)^x$ $x = -1, 2, 3$

