WRITE DOMAIN + RANGE

What Did the Baby Porcupine Say When It Backed Into a Cactus?

Determine which of the relations below are functions. Find the number of each relation that *is* a function at the bottom of the page and cross out the letter below it. When you finish, the answer to the title question will remain.

① {(−2, 7), (−1, 5), (0, 3), (1, 1), (2, 1)} fcn

② {(−7, 20), (3, 5), (0, 5), (−2, 0), (6, −4), (−6, −9), (4, 4)} fcn

③ {(4, 8), (−3, −2), (9, 6), (2, −1), (−4, −5), (2, 7), (−8, 0)} not fcn

④

x	y
0	−19
1	−12
2	−4
3	3
4	13
5	27

fcn

⑤

x	y
−5	8
−3	8
−1	−2
1	−2
3	11
5	23

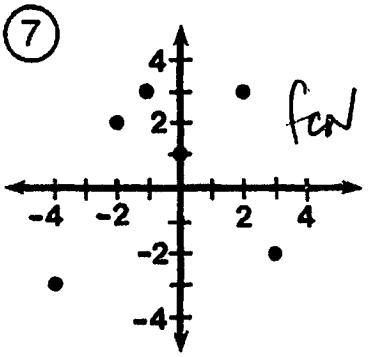
fcn

⑥

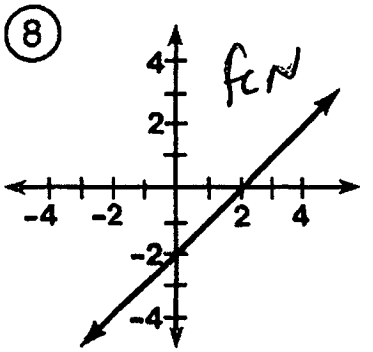
x	y
−2	−7
−2	5
0	−16
2	0
2	6

not fcn

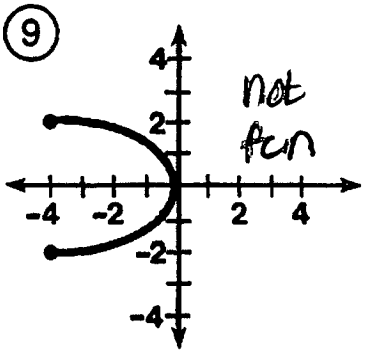
⑦



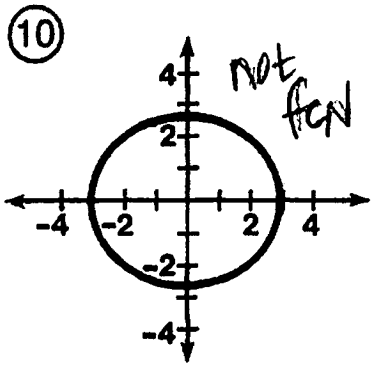
⑧



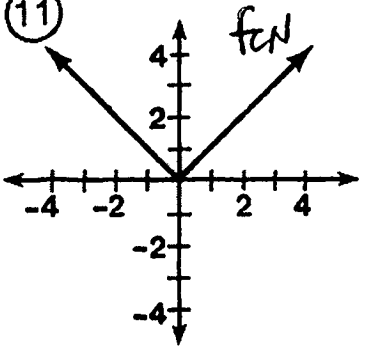
⑨



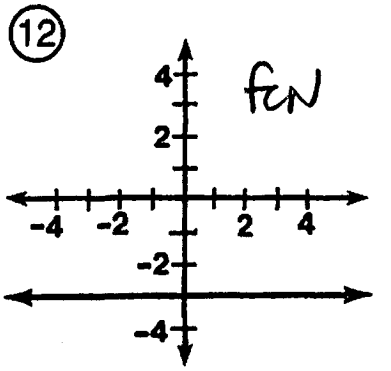
⑩



⑪



⑫



5	12	10	7	1	3	9	11	2	4	6	8
F	O	H	A	S	I	M	T	O	P	A	D

Hi Ma!

What Did They Call the Duck Who Became a Test Pilot?

Follow the directions given for each section. Cross out each box in the rectangle below that contains a correct answer. When you finish, print the letters from the remaining boxes in the spaces at the bottom of the page.

I For each function, find the indicated values.

(1)	$f(x) = 2x - 5$	A. $f(6)$ 7	B. $f(1)$ -3
(2)	$f(x) = x^2 - 4$	A. $f(12)$ 140	B. $f(-2)$ 0
(3)	$g(x) = x^2 - 7x + 1$	A. $g(3)$ -11	B. $g(0)$ 1
(4)	$h(x) = \frac{x+3}{x^2+x-6}$	A. $h(4)$ $\frac{1}{2}$	B. $h(-1)$ $-\frac{1}{3}$

II Find the range of each function for the given domain.

(5)	$f(x) = 3x + 2$	$D = \{-2, 0, 2\}$	$\{-4, 2, 8\}$
(6)	$g(x) = 9 - 5x$	$D = \{-3, -1, 1\}$	$\{24, 14, 4\}$
(7)	$F(x) = 2x^2 - 1$	$D = \{5, 1, -4\}$	$\{49, 1, 31\}$
(8)	$h(x) = x^2 - 8x + 3$	$D = \{1, 0, -1\}$	$\{-4, 3, 12\}$
(9)	$f(t) = \frac{t^2 + 4t}{t - 6}$	$D = \{4, 0, -4\}$	$\{-16, 0\}$
(10)	$G(n) = -n^2 + 2n + 3$	$D = \{-2, 1, 4\}$	$\{-5, 4\}$

SK $\{49, 1, 31\}$	Y 0	S $\frac{1}{2}$	AF $\{49, -1, 9\}$	E $\{-16, 0\}$	IL 7	LY $\{-16, 8, -2\}$
BE $\{24, 14, 4\}$	ER $\{-5, 0\}$	ST $\{-5, 4\}$	QU $-\frac{3}{2}$	IT $-\frac{1}{3}$	I -3	A $\{24, 14, -7\}$
DU -11	CK $\{-4, 7, 12\}$	MB 140	IN $\{-4, 2, 8\}$	H $\{-4, 3, 12\}$	ER $\{-4, 2, -1\}$	UP 1

A F L Y L - Q U A C K E R

A flyer quacker or "a fire cracker"