

DOUBLE CROSS

1. What do you get when you cross a porcupine with a gopher?

<u>A</u>	<u>T</u>	<u>U</u>	<u>N</u>	<u>N</u>	<u>E</u>	<u>L</u>	<u>W</u>	<u>I</u>	<u>T</u>	<u>H</u>	<u>L</u>	<u>E</u>	<u>A</u>	<u>K</u>	<u>S</u>
20	0	22	81	81	62	1	7	32	0	60	1	62	20	24	26

2. What do you get when you cross a pelican with a lightning bolt?

<u>A</u>	<u>B</u>	<u>I</u>	<u>G</u>	<u>E</u>	<u>L</u>	<u>E</u>	<u>C</u>	<u>T</u>	<u>R</u>	<u>I</u>	<u>C</u>	<u>B</u>	<u>I</u>	<u>L</u>	<u>L</u>
20	100	32	8	62	1	62	90	0	5	32	90	100	32	1	1



TO DECODE THE ANSWERS TO THESE TWO QUESTIONS:

Evaluate each expression below using the values

$$a = 1, b = 2, c = 3, w = 0, x = 10, \text{ and } y = 6.$$

Each time your answer appears in the code, write the letter of that exercise above it.



$$\textcircled{H} \quad xy = 10 \cdot 6 = 60$$

$$\textcircled{A} \quad b + (cy)2 + (3 \cdot 6) = 2 + 18 = 20$$

$$\textcircled{W} \quad x - (ac)10 - (1 \cdot 3) = 10 - 3 = 7$$

$$\textcircled{S} \quad (7b) + (4c) = 7 \cdot 2 + 4 \cdot 3 = 14 + 12 = 26$$

$$\textcircled{E} \quad (8x) - (3y) = 8 \cdot 10 - 3 \cdot 6 = 80 - 18 = 62$$

$$\textcircled{U} \quad (ax) + (by) = 1 \cdot 10 + 2 \cdot 6 = 10 + 12 = 22$$

$$\textcircled{B} \quad (2x) \cdot (b + c) = 2 \cdot 10 \cdot (2 + 3) = 20 \cdot 5 = 100$$

$$\textcircled{G} \quad \frac{(x+y)}{(c-a)} = \frac{10+6}{3-1} = \frac{16}{2} = 8$$

$$\textcircled{R} \quad \frac{(xy)}{(x+b)} = \frac{10 \cdot 6}{10+2} = \frac{60}{12} = 5$$

$$\textcircled{T} \quad \frac{(wa)}{b} = \frac{0 \cdot 1}{2} = \frac{0}{2} = 0$$

$$\textcircled{K} \quad (x-y) \cdot (y-w) = (10-6) \cdot (6-0) = 4 \cdot 6 = 24$$

$$\textcircled{N} \quad c \cdot (y+c) \cdot (y-c) = 3 \cdot (6+3) \cdot (6-3) = 3 \cdot 9 \cdot 3 = 81$$

$$\textcircled{C} \quad \frac{(3x)}{b} \cdot (abc) = \frac{3 \cdot 10}{2} \cdot (1 \cdot 2 \cdot 3) = \frac{30}{2} \cdot 6 = 15 \cdot 6 = 90$$

$$\textcircled{I} \quad (8bc) - (w+x+y) = (8 \cdot 2 \cdot 3) - (0+10+6) = 48 - 16 = 32$$

$$\textcircled{L} \quad \frac{(x-b)}{(y+b)} = \frac{10-2}{6+2} = \frac{8}{8} = 1$$

What Did The Farmer Do When His Chicken Wouldn't Lay Any Eggs?

DIRECTIONS:

For each exercise, determine whether or not the number in braces is a solution of the given equation.

Indicate "yes" or "no" by circling the number-letter in the appropriate column next to the exercise. Then write the letter in the matching numbered box at the bottom of the page.



		Yes	No
1	$2x + 5 = 13$ $2(4)+5=13$ $13=13$ ✓ {4}	9-D	26-U
2	$3y - 1 = 26$ $3(9)-1=26$ $26=26$ ✓ {9}	2-E	12-K
3	$6 + 5x = 44$ $6+5(8)=44$ $46=44$ ✗ {8}	19-I	23-A
4	$12 - x = 7$ $12-5=7$ $7=7$ ✓ {5}	16-N	4-B
5	$5n - 4 = 92$ $5(20)-4=92$ {20} $96=92$ ✗	24-Y	6-O
6	$52 = 6x + 10$ $52=6(7)+10$ {7} $52=52$ ✓	12-E	3-P
7	$27 = 15a - 1$ $27=15(2)-1$ {2} $27=29$ ✗	8-I	26-L
8	$2x + 1 = 3x - 3$ $2(4)+1=3(4)-3$ {4} $9=9$ ✓	19-G	27-K
9	$7x - 2 = 4x + 9$ $7(1)-2=4(1)+9$ {1} $5=13$ ✗	11-D	4-S
10	$m + 20 = 11m - 6$ $3+20=11(3)-6$ {3} $23=27$ ✗	15-U	13-R
11	$18 + 5x = 8x$ $18+5(6)=8(6)$ {6} $48=48$ ✓	24-M	10-O
12	$3x + 10 = 4$ $3(-2)+10=4$ $4=4$ ✓ {-2}	8-E	20-I
13	$4y - 1 = -21$ $4(-5)-1=-21$ $-21=-21$ ✓ {-5}	1-H	22-F
14	$6 + 2u = -7$ $6+2(-8)=-7$ $-10=-7$ ✗ {-8}	25-T	15-A
15	$30 - x = 31$ $30-(-1)=31$ $31=31$ ✓ {-1}	27-E	14-O
16	$9 - 5x = -40$ $9-5(10)=-40$ {10} $-41=-40$ ✗	3-L	7-W
17	$-12 = 6w + 6$ $-12=6(-3)+6$ $-12=-12$ ✓ {-3}	11-H	18-A
18	$x + 8 = -3x$ $-2+8=-3(-2)$ $6=6$ ✓ {-2}	20-G	25-D
19	$4y = y - 20$ $4(7)=7-20$ 7 $28=-13$ ✗	22-G	5-H
20	$-7d = 50 + 2d$ $-7(8)=50+2(8)$ $-56=66$ ✗ {8}	17-I	25-P
21	$6x + 1 = 3x - 11$ $6(-4)+1=3(-4)-11$ $-23=-23$ ✓ {-4}	18-E	21-O
22	$10k - 9 = 9k + 10$ $10(0)-9=9(0)+10$ $-9=10$ ✗ {0}	10-C	22-S

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
H	E		S	H	O	W	E	D		H	E	R		A	N		E	G	G		S	A	M	P	L	E