Why Are Bacteria Bad at Math?

Solve each equation and find your solution in the answer columns. Write the letter of the answer in each box that contains the exercise number. If the answer has a ●, shade in the box instead of writing a letter in it.
EXTRA: Complete the table and graph for each absolute value function.

Answers 1-8

- (G) 9, −9
- (V) $-9, 9\frac{1}{3}$
- (F) 7, −2
- (B) 6, −6
- ● $1\frac{1}{2}, -6$
- (T) 7, −7
- (K) $1\frac{1}{2}, -7$
- (N) 13, −5
- (E) 10, −3
- (C) 9, −6
- (U) 11, −21
- (W) no solution

(1) $|x| = 6$

(2) $|n - 4| = 9$

(3) $|y + 5| = 16$

(4) $|w| + 3 = 10$

(5) $|8x| = 72$

(6) $|2y - 7| = 13$

(7) $|9 + 4d| = 15$

(8) $|1 - 6t| = 55$

(9) $3|x + 11| = 24$

(10) $2|a - 17| = 10$

(11) $|8k - 3| + 5 = 40$

(12) $4|2 - 9y| = 28$

(13) $10 + |m - 6| = 7$

(14) $3|8 + d| - 1 = 29$

(15) $12\left|\frac{x}{4} + 11\right| = 60$

(16) $9 - \left|2 - \frac{1}{3}y\right| = 0$

Answers 9-16

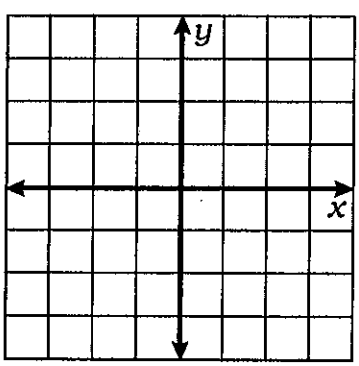
- (S) −24, −18
- ● $-\frac{5}{9}, 1$
- (L) −21, 33
- (P) 22, 12
- (R) $4\frac{3}{4}, 2$
- (I) 2, −18
- (H) −3, −19
- (A) −21, −4
- (D) −24, −64
- (Y) $4\frac{3}{4}, -4$
- (O) −3, 12
- (M) no solution

4	9	6	11	12	13	3	16	4	14	10	16	11	7	1	11	12	15	14	8	14	15	14	2	5

extra: Absolute Value Functions

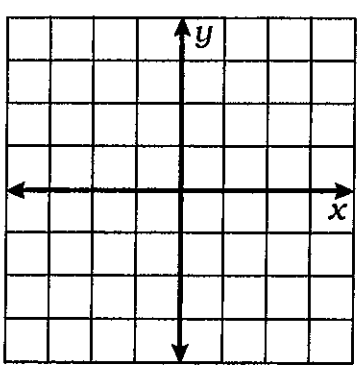
$y = |x|$

x	y
−3	
−2	
−1	
0	
1	
2	
3	



$y = |x + 1| - 2$

x	y
−4	
−3	
−2	
−1	
0	
1	
2	



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