A Better Multiple-Choice Math Test: Solving Equations

Directions: For problems 1-8, fill in the letters of your scantron that correspond to the correct answer listed at the bottom of this page. For example, if the correct answer to the problem is $x = -5$, you would shade in A, B, and E on your scantron for this problem.
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1. Solve: $8x - 1 = 5$

2. Solve: $2(x - 1) = 5x + 1$

3. Solve: $3 - (x + 4) = 6$

4. Solve: $\dfrac{x}{3} = \dfrac{4}{5}$

5. Solve: $6x^2 - 2x + 5 = 2x(5 + 3x)$

6. Solve: $12x - 5 = 2(6x + 4)$

7. Solve: $x^2 - 25 = 0$

8. Solve: $|x + 1| = 2$

A $x = -\dfrac{5}{7}$

B $x = \dfrac{5}{7}$

C $x = \dfrac{7}{5}$

D $x = \dfrac{12}{5}$

E $x = \dfrac{5}{12}$

AB $x = -\dfrac{5}{12}$

AC $x = 0$

AD $x = -1$

AE $x = 1$

BC $x = -7$

BD $x = 7$

BE $x = -12$

CD $x = 12$

CE $x = \dfrac{1}{2}$

DE $x = -\dfrac{3}{2}$

ABC $x = \dfrac{3}{4}$

ABD $x = 5$

ABE $x = -5$

ACD $x = -1$ or $x = 1$

ACE $x = -5$ or $x = 5$

ADE $x = -7$ or $x = 2$

BCD $x = -3$ or $x = 1$

BCE $x = -3$ or $x = 3$

BDE All real numbers

CDE No solution