

Grade 6 · One-Step Equations · Test Answer Key

Common Core 6.EE.B.5, 6.EE.B.6, 6.EE.B.7 · mathovore.fr

This answer key for the one-step equations test shows a worked solution and a scoring guide for each of the 9 questions. Award partial credit as described, and total the score out of 20 points.

Grade 6 Common Core: 6.EE.B.5 · 6.EE.B.6 · 6.EE.B.7

Question 1: Testing Values (2 points)

Try $x=6$: $6+5=11$, which is true. Try $x=4$: $4+5=9 \neq 11$. Try $x=9$: $9+5=14 \neq 11$.

The solution is $x=6$.

Scoring: 1 point for naming 6; 1 point for a valid substitution showing $6+5=11$.

Question 2: Whole-Number Equations (2 points)

- a. $x=40-13=27$
- b. $x=63 \div 7=9$

Scoring: 1 point for each correct solution.

Question 3: Decimal Equations (2 points)

- a. $x=11.3-4.8=6.5$
- b. $x=4.2 \div 0.6=7$

Scoring: 1 point for each correct solution.

Question 4: Fraction Equations (2 points)

- a. $x=\frac{5}{6}-\frac{1}{3}=\frac{5}{6}-\frac{2}{6}=\frac{3}{6}=\frac{1}{2}$
- b. $x=\frac{3}{2} \div 4=\frac{3}{2} \times \frac{1}{4}=\frac{3}{8}$

Scoring: 1 point for each correct answer in simplest form.

Question 5: Write and Solve (2 points)

- a. $n+12.5=30$

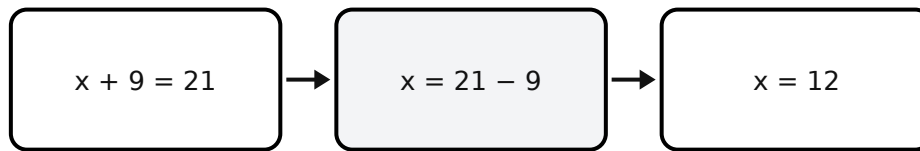
b. $n = 30 - 12.5 = 17.5$

Scoring: 1 point for the equation; 1 point for the solution.

Question 6: Finding the Error (3 points)

- a. Mei added 9 to 21 instead of undoing the addition with subtraction.
- b. Subtract 9 from both sides: $x = 21 - 9 = 12$
- c. $12 + 9 = 21$, which is true.

Scoring: 1 point for each part.

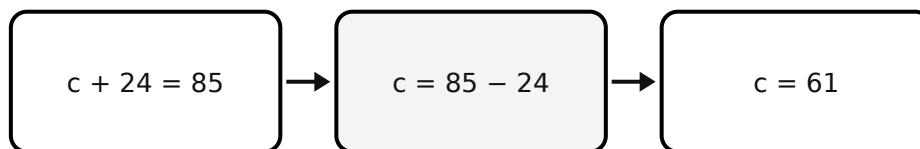


Correct solution.

Question 7: Baseball Cards (3 points)

- a. $c + 24 = 85$
- b. $c = 85 - 24 = 61$ **cards**
- c. $61 + 24 = 85$, which is true.

Scoring: 1 point for each part.



Jamal's cards.

Question 8: Peach Prices (2 points)

- a. $3.5p = 10.50$
- b. $p = 10.50 \div 3.5 = \$3.00$ **per pound**

Scoring: 1 point for the equation; 1 point for the correct price.

Question 9: Cooking with Flour (2 points)

- a. $\frac{3}{4} + f = 2$
- b. $f = 2 - \frac{3}{4} = \frac{8}{4} - \frac{3}{4} = \frac{5}{4}$, or $1\frac{1}{4}$ **cups**

Scoring: 1 point for the equation; 1 point for the correct amount.

Total
20 points