

Grade 6 - Solving One-Step Equations - Quiz

Common Core 6.EE.B.5, 6.EE.B.6, 6.EE.B.7 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This quiz has 10 multiple-choice questions on one-step equations and writing equations from stories (Common Core 6.EE.B.5, 6.EE.B.6, and 6.EE.B.7). Pick one answer for each and read the explanation.

Grade 6 · Common Core State Standards: **6.EE.B.5, 6.EE.B.6, 6.EE.B.7**

Questions

Question 1

What is the solution of $x+8=19$?

- A. $x=27$
- B. $x=11$
- C. $x=152$
- D. $x=8$

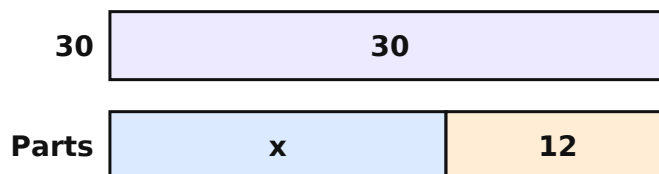
Question 2

What is the solution of $5x=40$?

- A. $x=35$
- B. $x=200$
- C. $x=8$
- D. $x=45$

Question 3

Which equation matches the tape diagram?



Tape diagram.

- A. $12x=30$
- B. $x-12=30$
- C. $\frac{x}{12}=30$

D. $x+12=30$

Question 4

Solve $\frac{x}{3}=8$.

- A. $x=24$
- B. $x=11$
- C. $x=\frac{8}{3}$
- D. $x=5$

Question 5

Which value of x makes $x-4=9$ true?

- A. 13
- B. 5
- C. 36
- D. 9

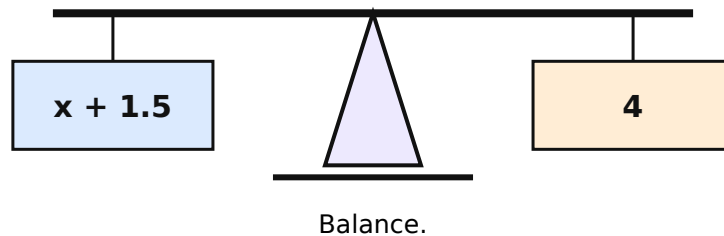
Question 6

A box holds 6 pencils. There are 54 pencils. Which equation finds the number of boxes b ?

- A. $b+6=54$
- B. $b-6=54$
- C. $6b=54$
- D. $\frac{b}{6}=54$

Question 7

Solve $x+1.5=4$.



- A. $x=5.5$
- B. $x=3.5$
- C. $x=6$
- D. $x=2.5$

Question 8

Solve $\frac{1}{2}x=7$.

- A. $x = 3.5$
- B. $x = 14$
- C. $x = 7.5$
- D. $x = 4$

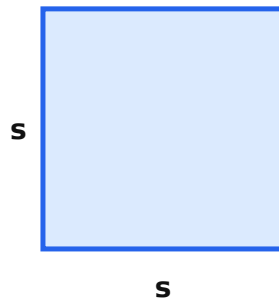
Question 9

After a \$9 discount a jacket costs \$31. Which equation finds the original price p ?

- A. $p + 9 = 31$
- B. $p - 9 = 31$
- C. $9p = 31$
- D. $\frac{p}{9} = 31$

Question 10

What does the solution of $4s = 28$ tell about a square with perimeter 28 inches?



Square.

- A. Each side is 7 inches
- B. Each side is 24 inches
- C. Each side is 112 inches
- D. The area is 28 square inches

Answers

1. **B** – Subtract 8 from both sides: $19 - 8 = 11$. Adding gives 27.
2. **C** – Divide both sides by 5.
3. **D** – Two parts x and 12 make the whole 30.
4. **A** – Multiply both sides by 3. Dividing 8 by 3 undoes the wrong operation.
5. **A** – $13 - 4 = 9$.
6. **C** – Equal groups: 6 times b is 54.
7. **D** – $4 - 1.5 = 2.5$.
8. **B** – Multiply by 2. Halving 7 is a common mistake.
9. **B** – Original price minus the discount equals the sale price.
10. **A** – $s = 28 \div 4 = 7$.

Remember

- A solution makes an equation true; check by substituting.
- Do the same operation to both sides to keep the equation balanced.
- Use the inverse operation: add and subtract, multiply and divide.
- Tape diagrams show addition and multiplication equations.
- Write an equation from a story by naming the unknown with a variable.