One-step word problems

Define x. Write an equation, solve it, and include the unit in your answer.

Name: _____ Date: _____

01 Mia had some stickers. She received 8 more and now has 23. How many stickers did she have at first?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

02 Ben gave away 6 marbles and has 17 left. How many marbles did he have before giving any away?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

03 Four notebooks cost $28 altogether. Each notebook costs the same amount. What is the price of one notebook?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

04 A teacher puts the same number of pencils into 4 cups. Each cup has 9 pencils. How many pencils are there in total?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

Two-step word problems

Define x. Write an equation, solve it, and include the unit in your answer.

Name: _____ Date: _____

05 A taxi charges a $3 starting fee plus $2 per mile. The total fare is $17. How many miles was the trip?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

06 Three boxes each contain the same number of pencils. After 5 pencils are removed, 22 remain. How many were in each box?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

07 Cards are divided equally into 5 piles. Then 2 extra cards are added to each pile, making 8 in each. How many cards were there originally?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

08 Four tickets have the same price. A single $6 booking fee makes the total cost $42. How much does one ticket cost?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

Mixed word problem practice

Define x. Write an equation, solve it, and include the unit in your answer.

Name: _____ Date: _____

09 A rectangle has length 12 cm and perimeter 38 cm. What is its width? Use P = 2(length + width).

x means: _____

Equation: _____ Solution: _____

Check / units: _____

10 Sam has 3 more coins than twice the number Lee has. Sam has 19 coins. How many coins does Lee have?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

11 Five bags contain the same number of apples. After 7 apples are eaten, 18 remain. How many apples were in each bag?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

12 A club charges an $8 joining fee and $4 per week. A member has paid $40 in total. How many weeks have they paid for?

x means: _____

Equation: _____ Solution: _____

Check / units: _____

Answer key

Equivalent equations are accepted when they represent the same relationship.

Name: _____ Date: _____

01 **x + 8 = 23 -> x = 15 | 15 stickers**

Check: 15 + 8 = 23

02 **x - 6 = 17 -> x = 23 | 23 marbles**

Check: 23 - 6 = 17

03 **4x = 28 -> x = 7 | $7 per notebook**

Check: 4(7) = 28

04 **x / 4 = 9 -> x = 36 | 36 pencils**

Check: 36 / 4 = 9

05 **2x + 3 = 17 -> x = 7 | 7 miles**

Check: 2(7) + 3 = 17

06 **3x - 5 = 22 -> x = 9 | 9 pencils per box**

Check: 3(9) - 5 = 22

07 **x / 5 + 2 = 8 -> x = 30 | 30 original cards**

Check: 30 / 5 + 2 = 8

08 **4x + 6 = 42 -> x = 9 | $9 per ticket**

Check: 4(9) + 6 = 42

09 **2(12 + x) = 38 -> x = 7 | 7 cm**

Check: 2(12 + 7) = 38

10 **2x + 3 = 19 -> x = 8 | 8 coins**

Check: 2(8) + 3 = 19

11 **5x - 7 = 18 -> x = 5 | 5 apples per bag**

Check: 5(5) - 7 = 18

12 **8 + 4x = 40 -> x = 8 | 8 weeks**

Check: 8 + 4(8) = 40