

Grade 4 - Multiplicative Comparison - Quiz

Common Core 4.OA.A.1, 4.OA.A.2 · maths-pdf.fr/en/

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

Choose the best answer for each of the 10 questions about times as many and bar models.
Read each question carefully, then check the explanation to learn from any mistake.

Grade 4 · Common Core State Standards: **4.OA.A.1, 4.OA.A.2**

Questions

Question 1

Which number is 5 times as many as 7?

- A. 12
- B. 35
- C. 2
- D. 57

Question 2

Which equation shows that 42 is 6 times as many as 7?

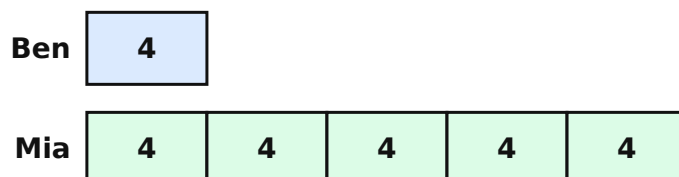
- A. $42 = 6 + 7$
- B. $42 = 7 \times 7$
- C. $42 = 6 \times 7$
- D. $6 = 42 \times 7$

Question 3

Which sentence is a multiplicative comparison?

- A. Ana has 3 more stickers than Ben.
- B. Ana has 3 fewer stickers than Ben.
- C. Ana has 3 times as many stickers as Ben.
- D. Ana has 3 stickers and Ben has 4.

Question 4



Ben has 4 books and Mia has 20 books.

Mia has how many times as many books as Ben?

- A. 5
- B. 16
- C. 4
- D. 24

Question 5

Sam has 9 cards. Pia has 8 times as many cards as Sam. How many cards does Pia have?

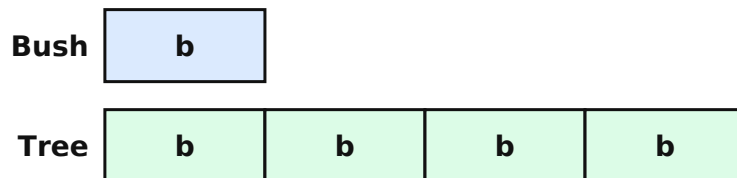
- A. 17
- B. 1
- C. 81
- D. 72

Question 6

A game costs \$63. A card costs \$9. The game costs how many times as much as the card?

- A. 54
- B. 7
- C. 72
- D. 8

Question 7



A tree is 28 feet tall and 4 times as tall as a bush.

How tall is the bush?

- A. 7 feet
- B. 24 feet
- C. 32 feet
- D. 112 feet

Question 8

Which sentence is an additive comparison?

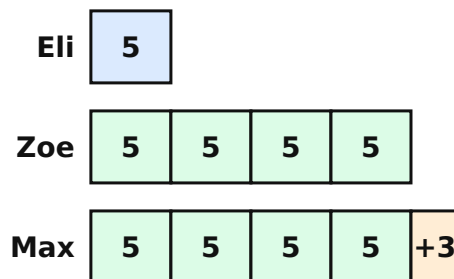
- A. Ana has 6 times as many stickers as Ben.
- B. Ana has twice as many stickers as Ben.
- C. Ana has 3 times as many stickers as Ben.
- D. Ana has 6 more stickers than Ben.

Question 9

Priya has 12 pencils. Diego has 3 times as many pencils as Priya. How many more pencils does Diego have than Priya?

- A. 36
- B. 24
- C. 15
- D. 4

Question 10



Eli has 5 books. Zoe has 4 times as many. Max has 3 more than Zoe.

How many books does Max have?

- A. 23
- B. 20
- C. 12
- D. 60

Answers

1. **B** - 5 times as many as 7 is $5 \times 7 = 35$. Adding 5 and 7 gives 12, which is not a times-as-many comparison.
2. **C** - "6 times as many as 7" means 6×7 , and $6 \times 7 = 42$. Addition is for 'more than' comparisons.
3. **C** - 'Times as many' tells you to multiply. 'More' and 'fewer' are additive comparisons.
4. **A** - Mia's 20 books are made of five groups of 4, so she has 5 times as many. The number 16 is how many more books Mia has.
5. **D** - 8 times as many as 9 is $8 \times 9 = 72$. Adding gives 17.
6. **B** - Divide: $63 \div 9 = 7$. Subtracting gives 54, which is how many dollars more the game costs.
7. **A** - $28 = 4 \times b$, so $b = 28 \div 4 = 7$. Adding or multiplying the wrong way gives 32 or 112.
8. **D** - 'More than' is additive. Each other choice uses 'times as many', which is multiplicative.
9. **B** - Diego has $3 \times 12 = 36$ pencils. Then $36 - 12 = 24$ more. The number 36 is how many Diego has in all.
10. **A** - Zoe has $4 \times 5 = 20$ books. Max has 3 more: $20 + 3 = 23$. The number 20 is Zoe's amount.

Remember

- "A is n times as many as B" means $A = n \times B$.
- "More than" and "fewer than" are additive comparisons; "times as many" is multiplicative.
- To find the bigger amount, multiply. To find the smaller amount or the number of times, divide.
- Use a letter for the unknown, such as $28 = 4 \times b$.
- A bar model with equal units shows the comparison clearly.