

How to Administer the Quick Check:

- The Quick Check consists of two parts: an Instructor portion which includes solutions and a Student portion with problems for each concept.
- **Your student need only complete the Quick Check problems for the concepts for which you responded **Unsure**.**
- Have your student complete the Quick Check items independently. You may attempt to clarify the wording of a question, but you should not provide hints about how to solve a problem. Note: The questions for section 4.2 require a verbal response from the student and appear on the Instructor Portion only.
- Return to the Question Block when you have checked your student's work.
- *You should now be able to answer **Yes** or **No** for each question.*
- Click **Next** to go to the next screen.

4.1

Does my student understand multiplication in terms of repeated addition and in geometric (i.e. rectangular area) terms?

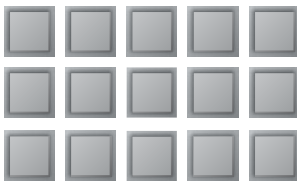
4.1a

Write $4 + 4 + 4$ as a multiplication problem.

4×3 or 3×4

4.1b

Write the multiplication fact that the picture represents.



5×3 or 3×5



4.2

Can my student immediately give the correct answers to all single-digit multiplication problems?

4.2a

Ask your student to give the answer to the following problem from memory: $6 \times 7 = \underline{\quad}$

42

4.2b

Ask your student to give the answer to the following problem from memory: $8 \times 3 = \underline{\quad}$

24



4.3

Can my student explain why we break multiple-digit multiplication problems into smaller parts (partial products)?

4.3a

Listen to your student explain why 14×12 is the same as $(14 \times 10) + (14 \times 2)$.

This is possible because you multiply each digit of one factor by each of the digits in the other factor, taking into account the place value of each digit. Then you can add all the partial products to find the total product.

Note: Your student may not use all of the same terminology shown here, but should be able to describe in their own words why the problems are the same.

4.3b

Listen to your student explain why $(50 \times 6) + (4 \times 6)$ is the same as 54×6 .

This is possible because you multiply each digit of one factor by each of the digits in the other factor, taking into account the place value of each digit. Then you can add all the partial products to find the total product.

Note: Your student may not use all of the same terminology shown here, but should be able to describe in their own words why the problems are the same.



4.4

Can my student confidently solve words problems involving multiplication?

4.4a

Mike works 4 days a week. He works 8 hours a day.

■ Find the number of hours Mike works in one week.

32 hours

$$4 \times 8 = 32$$

4.4b

The parking lot was full.

■ If there were 15 rows with 35 cars in each, how many cars were in the parking lot?

525 cars

$$15 \times 35 = 525 \text{ or } 35 \times 15 = 525$$

How to complete the Quick Check:

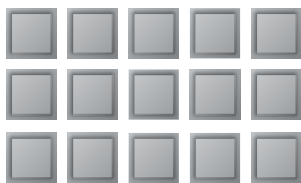
- You only need to complete the problems your parent or instructor assigns.

4.1

4.1a

Write $4 + 4 + 4$ as a multiplication problem.

4.1b

Write the multiplication fact that the picture represents.



4.3

4.3a

Explain your instructor why 14×12 is the same as $(14 \times 10) + (14 \times 2)$.

4.3b

Explain to your instructor why $(50 \times 6) + (4 \times 6)$ is the same as 54×6 .



4.4

4.4a

Mike works 4 days a week. He works 8 hours a day.



Find the number of hours Mike works in one week.

4.4b

The parking lot was full.



If there were 15 rows with 35 cars in each, how many cars were in the parking lot?