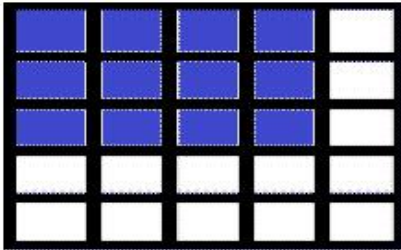# 2nd Grade Operations and Algebraic Thinking- Work with equal groups of objects to gain foundations for multiplication, Standard 4, Pre Test 1

Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1.

Which equation below describes the colored portion of the array?
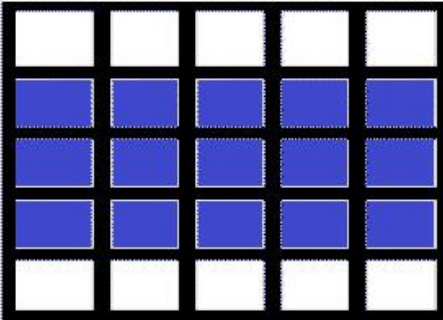a. $5 + 5 + 5$ c. $3 + 3 + 3$
b. $4 + 1 + 4 + 1$ d. $4 + 4 + 4$

2.

Which equation below describes the colored portion of the array?
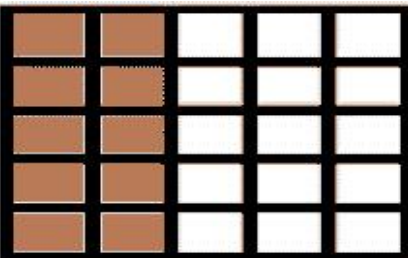a. $5 + 5 + 3$ c. $3 + 3 + 3 + 3 + 3$
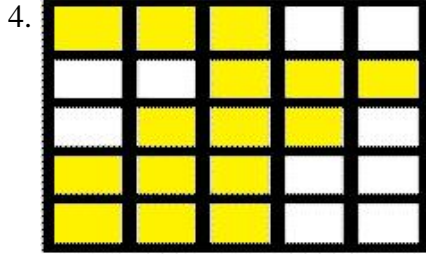b. $5 + 5 + 5$ d. $4 + 4 + 4$

3.

Which equation below describes the colored portion of the array?
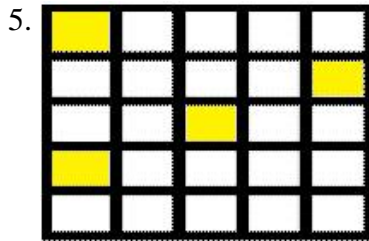a. $2 + 2 + 2 + 2 + 2$ c. $3 + 3 + 3 + 3 + 3$
b. $5 + 5 + 5 + 5 + 5$ d. $1 + 1$

4.

Which equation below describes the colored portion of the array?
a. $2 + 2 + 2 + 2 + 2$
b. $5 + 5 + 5 + 5 + 5$

c. $3 + 3 + 3 + 3 + 3$
d. $1 + 1$

5.

Which equation below describes the colored portion of the array?
a. $2 + 2 + 2 + 2 + 2$
b. $4 + 4 + 4 + 4$

c. $3 + 3 + 3 + 3 + 3$
d. $1 + 1 + 1 + 1$

6.

Which array below describes this equation: $3 + 3 + 3$?
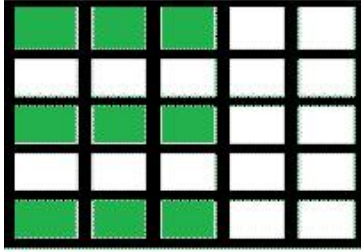
a.

c.

b.

d.

7.

Which array below describes this equation: $2 + 2 + 2$?
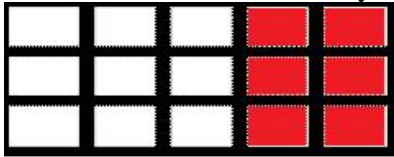
a.

c.

b.

d.

Completion
Complete each statement.

8. Write an equation that shows the sum of the colored squares in the array below. Put a space between each number and symbol. **Don't forget the = sign <u>and</u> the answer.**

[Answer field]

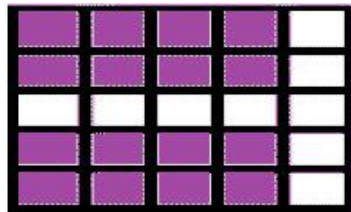9. Write an equation that shows the sum of the colored squares in the array below. Put a space between each number and symbol. **Don't forget the = sign <u>and</u> the answer.**

[Answer field]

10. Write an equation that shows the sum of the colored squares in the array below. Put a space between each number and symbol. **Don't forget the = sign <u>and</u> the answer.**

[Answer field]

Answer 1: D

Answer 2: B

Answer 3: A

Answer 4: C

Answer 5: D

Answer 6: B

Answer 7: C

Answer 8: $3 + 3 + 3 = 9$

Answer 9: 2 + 2 + 2 = 6

Answer 10: 4 + 4+ 4 + 4 = 16