

## Grade 3: Unit 9 Pre-Test

Which equation(s) have a product greater than 300?

3.NBT.3

1)  $40 \times 9 =$

Yes

No

2)  $70 \times 2 =$

Yes

No

3)  $3 \times 90 =$

Yes

No

4) How much do six 50-pound dogs weigh?

3.OA.3/3.NBT.3

Show your work. (Example)

Dog's weight |  $50 \mid 50 \mid 50 \mid 50 \mid 50 \mid 50 = ?$

$6 \times 50 = 300$

300 pounds5) Valerie has 6 packages of index cards. There are 80 index cards in each package. She knows that  $6 \times 8 = 48$ .

2pt

Explain how Valerie can use what she knows to find the solution.

3.NBT.3

80 is ten times more than 8 so  
 Valerie can multiply 10 to 48 to  
 find her solution which is 480.

Jeff has 6 bags of ice. Each bag weighs 3 pounds. How many pounds does Jeff have altogether?

3.OA.3/3.OA.5/3.OA.7

6)  
1pt  
7)  
1pt  
8)  
1pt

$3 \times 6$

Yes

No

$3 + 3 + 3 + 3 + 3$

Yes

No

$(3 \times 2) + (3 \times 4)$

Yes

No

9) Erin read 3 times as many books as Colin. Colin read 7 books. How many books did Erin read?

3.OA.3/3.OA.7

1pt

Show your work.

Erin's books

Colin's books

$\boxed{7} \boxed{7} \boxed{7} = ?$   
 $\boxed{\phantom{00}} = 7$

$7 \times 3 = 21$

Erin read 21 books.

10) Write a story problem for  $72 \div 9$ . Include the quotient in the story. 3.OA.7

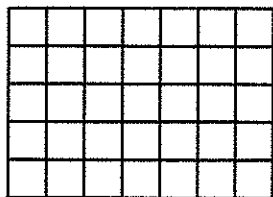
2pt

There are 72 books and 9 shelves on the bookcase. If I placed the same amount of books on each shelf, there will be 8 books on each shelf.

Which rectangle(s) have an area of 36 squared units?

3.MD.5/3.MD.7

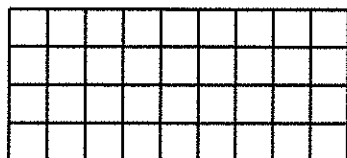
11)  
1pt



Yes

No

12)  
1pt



Yes

No

13)  
1pt



Yes

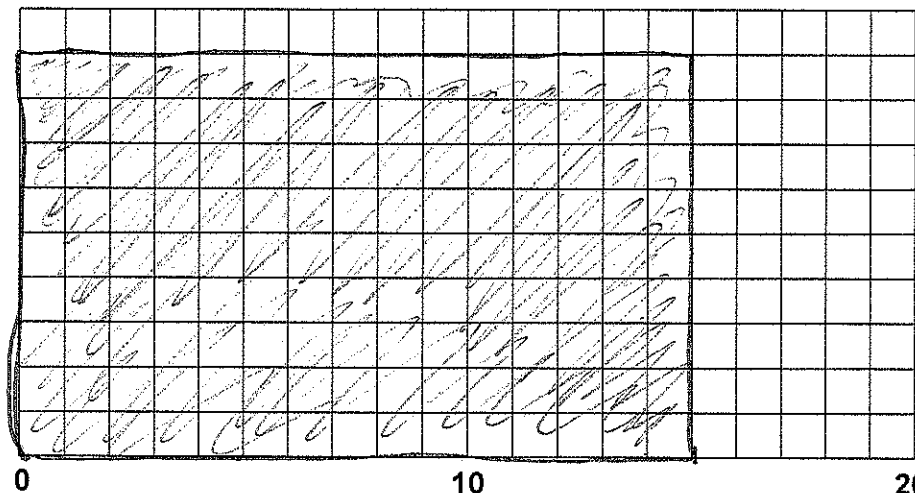
No

14) Find the area of a porch 15 feet long and 9 feet wide. Use the area model to help you solve.

3.MD.7/3.OA.5

1pt

10



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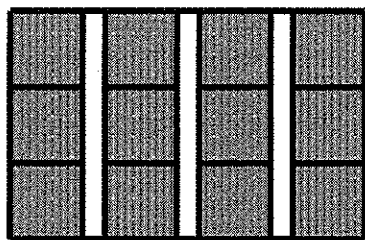
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20

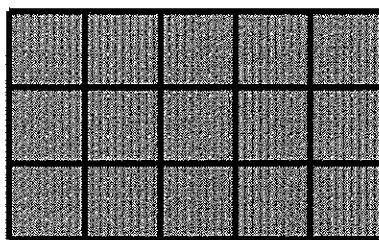
The area is 135 feet<sup>2</sup>

Jasmin and Hassan each use unit squares to tile a piece of paper. Their work is shown below.

Jasmin's Array



Hassan's Array



- 15) Which student measured incorrectly? Explain why.

3.MD.5

2pt Jasmin measured incorrectly because there are gaps in her measurement.

- 16) What is the area of the piece of paper? Explain your strategy for finding the area.

3.MD.7

2pt

Hassan measured correctly and there are 15 unit<sup>2</sup>. I added each row,  $5+5+5=15$ .