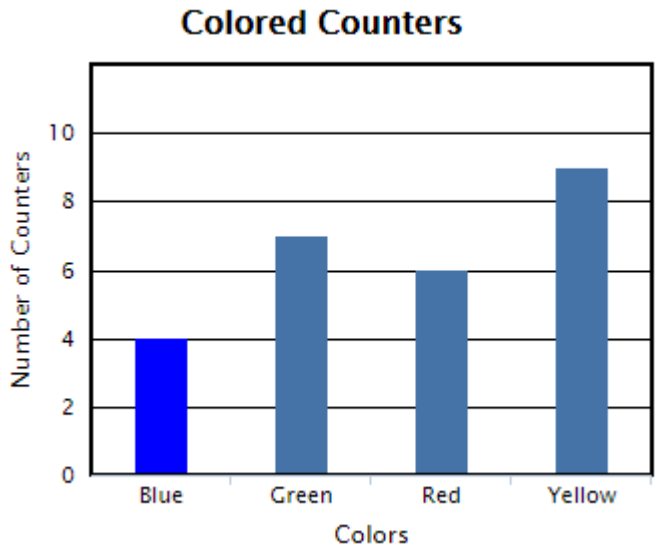
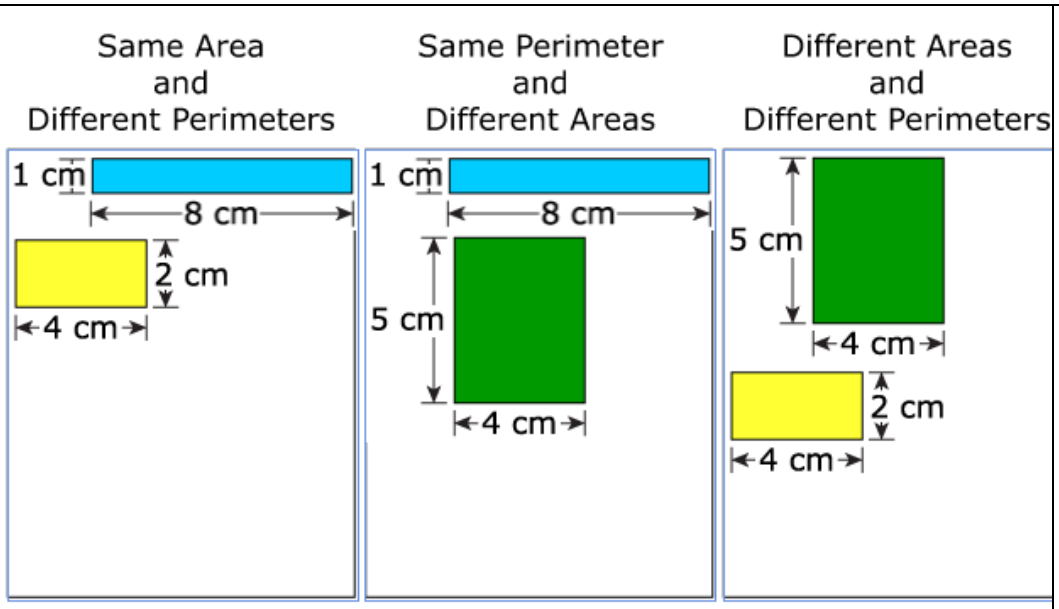
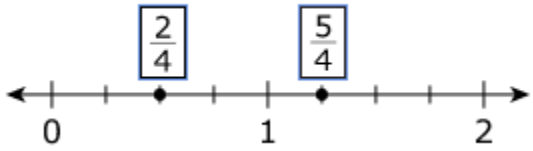
Released Test Answer and Alignment Document

Mathematics – Grade 3

Spring 2016

Item Number	Answer Key	Evidence Statement Key
1.	B	3.G.1
2.	C	3.G.2
3.	A, D, F	3.MD.1-1
4.	B	3.MD.2-1
5.	12	3.MD.2-2
6.		3.MD.3-1
7.	16	3.MD.6
8.	C, E	3.MD.7b-1

9.		3.MD.8
10.	B	3.NBT.2
11.	$605 + 195 =$ 800	3.NBT.2
12.	$8 \times 70 =$ 560 $4 \times 40 =$ 160 $5 \times 50 =$ 250 $3 \times 60 =$ 180	3.NBT.3
13.	$4 \times 50 =$ 200	3.NBT.3
14.	C	3.NF.1
15.		3.NF.2
16.	C	3.NF.3a-2
17.	D	3.NF.3c
18.	B	3.OA.2
19.	D	3.OA.2
20.	70	3.OA.3-1

21.	A, B, D	3.OA.3-2
22.	4	3.OA.3-3
23.	C	3.OA.3-4
24.	6 × ? = 48 OR ? × 6 = 48	3.OA.6
25.	$5 \times 5 =$ 25 $4 \times 2 =$ 8 $3 \times 3 =$ 9 $1 \times 9 =$ 9 $4 \times 6 =$ 24	3.OA.7-1
26.	B, C, D, F	3.OA.7-2
27.	Part A: Nearest Hundred Wednesday = 100 Thursday = 300 Friday = 400 Part B: C	3.Int.1
28.	Length of the pool: 10 yards Perimeter of the pool: 34 yards	3.Int.3
29.	Part A: C Part B: 17	3.MD.3-3
30.	Part A: 8 Part B: 42	3.OA.8
31.	See Rubric	3.C.1-2
32.	Part A: See Rubric Part B: See Rubric	3.C.4-1

33.	Part A: See Rubric Part B: See Rubric Part C: See Rubric	3.C.4-7
34.	Part A: See Rubric Part B: See Rubric	3.D.1

#31 Rubric	
Score	**Description**
3	Student response includes the following 3 elements. • **Reasoning component** = 1 point o The student describes how to find the number that Martin used to create the pattern. • **Reasoning component** = 1 point o The student explains how multiplication can be used to create the pattern. • **Reasoning component** = 1 point o The student explains why 55 cannot be in the pattern. Sample Student Response: "Martin is adding 6 to the prior number to form the pattern" or the student may show computation for at least 3 repetitions indicating that the difference between members of the pattern is 6, such as: "12-6=6, 18-12=6, 24-18=6. He is adding 6 each time" or show that 6 is the common addend for at least 3 repetitions, such as: "6+6=12, 12+6=18, 18+6=24" or extend the pattern with at least 3 repetitions beyond the numbers provided, such as: "6 12 18 24 30 36 42 48 54 60." "The pattern can be used by multiplying by 6. The first number is equal to 6x1, the second number is equal to 6x2, the third number is equal to 6x3, etc." "55 cannot be included in the pattern because it is not a multiple of 6." OR "55 is an odd number and the pattern is all even numbers." **Note**: • A variety of explanations are valid. If the student makes a computation mistake in the first 2 elements, the point can be awarded if the explanation is sound.
2	Student response includes 2 of the above elements.
1	Student response includes 1 of the above elements.

0	Student response is incorrect or irrelevant.

#32 Rubric Part A	
Score	**Description**
2	Student response includes the following 2 elements. • **Reasoning component** = 1 point o The student lists Zora's correct reasoning. • **Reasoning component** = 1 point o The student lists Zora's incorrect reasoning. Sample Student Response: "Zora is correct when she broke the 5 into 2 + 3 and said that 4 × 5 is the same as 4 × (3+2)." "When Zora found the value of 4 × (3+2), she found her answer by first multiplying 4 × 3 and then adding 2, which equals 14 and is incorrect." **Notes:** • A variety of ways of listing responses are possible. As long as the student correctly identifies Zora's correct and incorrect reasoning, credit should be given. • The student does not need to use the terms *properties of operations*, *distributive property*, or *parentheses* to receive credit.
1	Student response includes 1 of the above elements.
0	Student response is incorrect or irrelevant.
#32 Rubric Part B	
Score	**Description**
2	Student response includes the following 2 elements. • **Reasoning component** = 1 point o The student explains how to correct the error. • **Computation component** = 1 point o The student provides the response of 20. Sample Student Response: "Zora should have multiplied 4 × 3 and then 4 × 2 and then added

	12 + 8, which equals 20." **Notes:** • A variety of explanations are possible. As long as the student correctly explains how to solve the problem, credit should be given. • If a computation mistake is made, credit cannot be given for computation but can be given for a valid explanation. • The student does not need to use the terms *properties of operations*, *distributive property*, or *parentheses* to receive credit.
1	Student response includes 1 of the above elements.
0	Student response is incorrect or irrelevant.

#33 Rubric Part A	
Score	**Description**
1	Student response includes the following element. • **Reasoning component** = 1 point o The student explains the place value error made. Sample Student Response: "Rick is incorrect. There is the same number of hundreds, but 8 tens is more than 7 tens." **Note**: • A variety of explanations are valid as long as the student indicates a clear understanding of the error made.
0	Student response is incorrect or irrelevant.
#33 Rubric Part B	
Score	**Description**
1	Student response includes the following element. • **Reasoning component** = 1 point o The student provides a correct comparison between the number of books read in January and the number of books read in February.

	Sample Student Response: "172 < 180" or "180 > 172"
0	Student response is incorrect or irrelevant.

#33 Rubric Part C	
Score	**Description**
2	Student response includes the following 2 elements. • **Reasoning component** = 1 point o The student writes a correct equation to indicate the total number of books read in January and February. • **Computation component** = 1 point o Correct answer, 352. Sample Student Response: "172 + 180 = ? ? is 352" OR "172 + 180 = 352" **Note**: • A variety of equations are valid.
1	Student response includes 1 of the above elements.
0	Student response is incorrect or irrelevant.

#34 Rubric Part A	
Score	**Description**
2	Student response includes the following 2 elements. • **Computation component** = 1 point o Correct answer, 22. • **Modeling component** = 1 point o Valid work or explanation of the answer. Sample Student Response: "A total amount of 22 fluid ounces of water are left in the jar. To find this, I solved:" 3 × 8 = 24 9 × 2 = 18 24 + 18 = 42 64 – 42 = 22 Or other valid response
1	Student response includes 1 of the above elements.
0	Student response is incorrect or irrelevant.

#34 Rubric Part B	
Score	**Description**
1	Student response includes the following element. • **Modeling component** = 1 point o An equation, with letter representing unknown, that can be used to find the number of 7-ounce cups that can be filled. Sample Student Response: "42 ÷ *p* = 7" "*p* is 6" **Notes**: • Other valid equations such as 42 ÷ 7 = *p* or 7 × *p* = 42 will be accepted. • Students do not need to include the answer to the equation, i.e., *p* = 6. Or other valid response
0	Student response is incorrect or irrelevant.