THIRD SPACE LEARNING

3rd Grade NY State Practice Math Test

New York Practice Test Grade 3

Grade 3

Questions

Name: ....

Class: ....

Date: ....

Score: ....

SESSION 1:

25 Multiple Choice

Standard: 3.OA.B.5

DOK 2

1 Choose the expression that is another way to show 10×7

A. $(2 + 5) \times 7$

B. $(2 \times 5) \times 7$

C. $(2 \times 5) + 7$

D. $(2 + 5) + 7$

Standard: 3.NF.A.3b
DOK 1

2 Which fraction is equivalent to $\frac{2}{6}$?

A. $\frac{1}{2}$

B. $\frac{1}{6}$

C. $\frac{1}{4}$

D. $\frac{1}{3}$

Standard: 3.OA.B.5
DOK 2

3 Joanne has 6 boxes of pencils. Each box has 12 pencils in it. Which expression has can be used to find the total number of pencils that Joanne has?
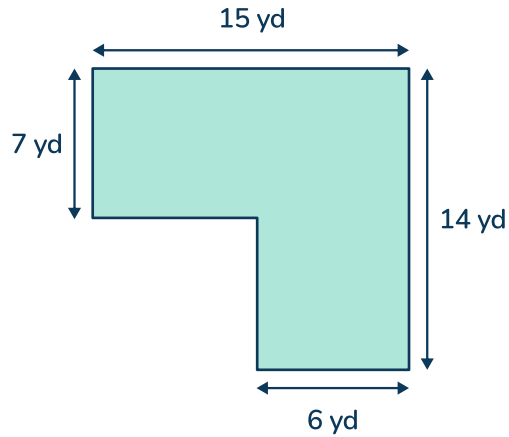
A. 12 x 6

B. 12 ÷ 6

C. 12 + 6

D. 12 - 6

Standard: 3.MD.C.7.d
DOK 2

4 Julie moved into a new house, and the diagram below shows the shape of her new room.

15 yd

7 yd

14 yd

6 yd

What is the area of Julie's new room in square yards?

A. 42 yd²

B. 58 yd²

C. 189 yd²

D. 147 yd²

Standard: 3.NBT.A.3
DOK 1

5 Which number makes the equation true?
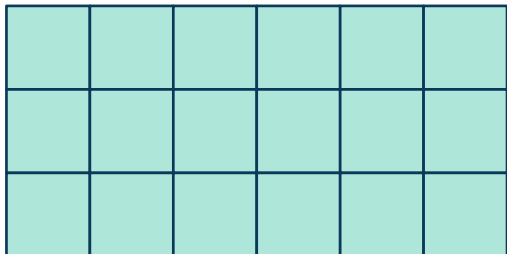
$$90 \times 6 = \underline{\hspace{2cm}}$$
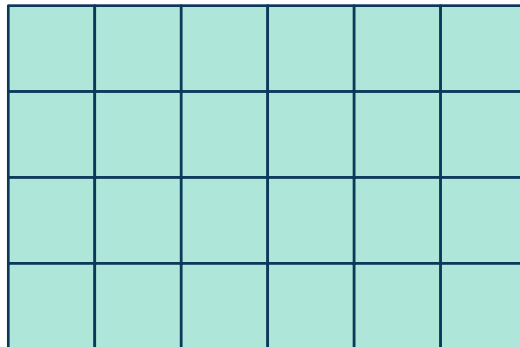
A. 540

B. 96

C. 54

D. 150

Standard: 3.OA.A1
DOK 1
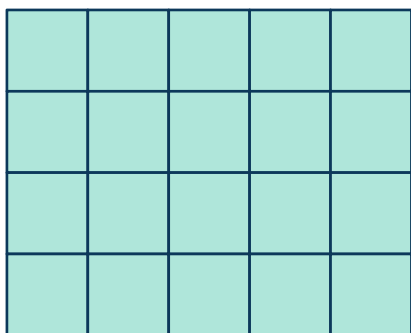
6 Which array represents 4 x 6?
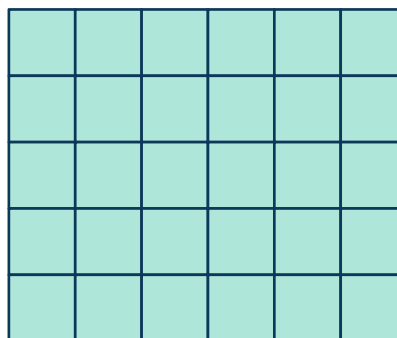
a.

c.

b.

d.

Standard: 3.MD.A.2
DOK 2

7 The local township wants to replenish the sand on the beaches. They have 6 bags of sand to replenish the beach between the 5th Avenue entrance and the 6th Avenue entrance. The mass of each bag is 12 kilograms. What is the total mass, in kilograms, of all the bags of sand?

A. 2 kilograms
B. 6 kilograms
C. 18 kilograms
D. 72 kilograms

Standard: 3.NBT.A.1
DOK 1

8 The distance from Yellowstone National Park to Glacier National Park is 367 miles. What is 367 rounded to the nearest hundred?

      A. 300

      B. 400

      C. 360

      D. 370

Standard: 3.NF.A.2b
DOK 2

9 Which fraction is represented by point P on the number line shown below?

P

0   1

      A. $\dfrac{1}{4}$

      B. $\dfrac{1}{3}$

      C. $\dfrac{2}{3}$

      D. $\dfrac{2}{4}$

Standard: 3.G.A.2
DOK 2

10   Kaitlin has a large rectangular piece of material that she cuts into 6 equal pieces. She uses one of the pieces to make a headband. What fraction of the material did she use to make the headband?

   A. $\dfrac{1}{5}$

   B. $\dfrac{1}{6}$

   C. $\dfrac{1}{4}$

   D. $\dfrac{1}{2}$

Standard: 3.OA.D.9
DOK 2

11   What rule was used for the number pattern below?

   36, 33, 30, 27, 24, 21....

      A. Divide by 3
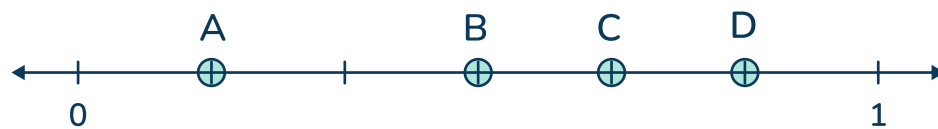   B. Add 3
      C. Subtract 3
      D. Multiply by 3

Standard: 3.NF.A.2.b
DOK 2

12 The distance between Sherly's house and her friend's house is 1 mile. On the way to her friend's house, she stops at an ice cream shop $\frac{5}{6}$ of a mile from her home. What point on the number line shows the location of the ice cream place.

A. A

B. B

C. C

D. D

Standard: 3.OA.B.5
DOK 2

13 Last week, Gina ran 4 miles each day for 6 days. This week, she ran 4 miles each day for 4 days. Which expression can be used to represent the total amount of miles Gina ran in the two weeks?

A. 4 + (6 + 4)

B. 4 x (64)

C. 4 x (6 + 4)

D. (4 + 6) x (4+4)
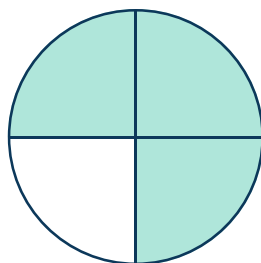
Standard: 3.MD.A.2
DOK 1

14 The water jugs in the office hold about 9 gallons of water. If there are 12 offices that have water jugs. What is the total number of gallons of water in all the offices?

    A. 18 gallons
    B. 98 gallons
    C. 108 gallons
    D. 99 gallons

Standard: 3.NF.A.3d
DOK 1

15 The shaded part of the model below represents a fraction.

Which model is shaded to represent an equivalent fraction to the model given?

A

B

C

D
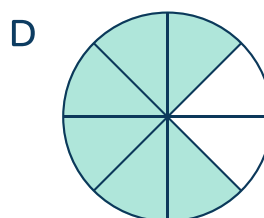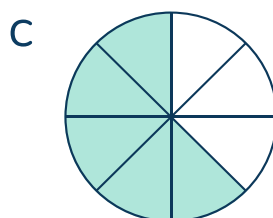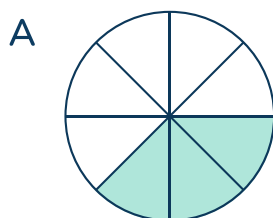
Standard: 3.G.A.2
DOK 2

16 Christopher divided a rectangle into four equal parts. Which one of the rectangles represents the correct one?

a.

c.

b.

d.
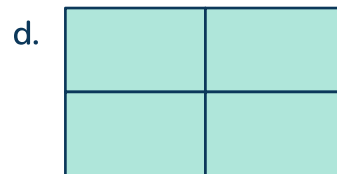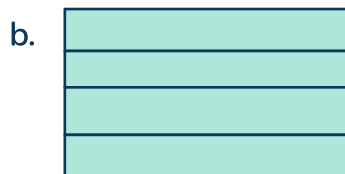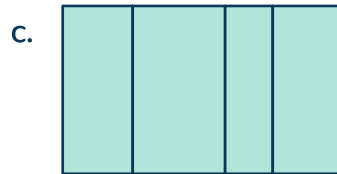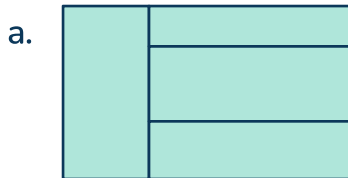
Standard: 3.OA.A.4
DOK 1

17 What number makes the equations true?

$$7 \times \underline{\hspace{1cm}} = 42$$

$$42 \div 7 = \underline{\hspace{1cm}}$$

A. 6
B. 8
C. 9
D. 7

Standard: 3.MD.C.5b
DOK 2

18 Kellie draws a rectangle in her notebook. She labels two of the sides as 3 units and the other two sides as 6 units. Which statement about the rectangle she drew is true?
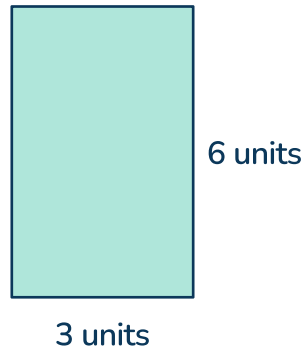
6 units

3 units

A. The perimeter is 18 square units and the area is 18 units

B. The perimeter and area of all rectangles are the same.

C. The perimeter is 18 units and the area is 18 square units.

D. The perimeter is 18 units and the area is 9 square units.

Standard: 3.NF.A.3d
DOK 1

19 Angela had a rectangle with 8 equal parts. She shaded 2 of them. Which fractions does Angela's rectangle show are equivalent?
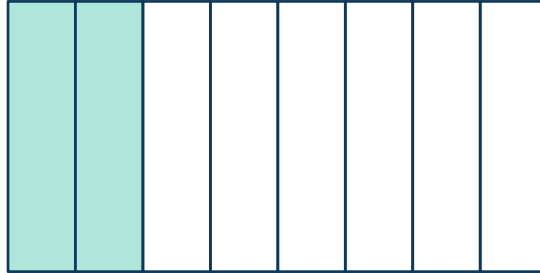
a. $\dfrac{1}{8} = \dfrac{1}{4}$

b. $\dfrac{2}{8} = \dfrac{1}{4}$

c. $\dfrac{1}{8} = \dfrac{1}{2}$

d. $\dfrac{2}{8} = \dfrac{1}{2}$

Standard: 3.MD.A.1
DOK 1

20 Luca is meeting his friends at the park at the time on the clock below. What is the time represented?

A. 3:07

B. 3:05

C. 3:10

D. 3:09

21 Peter and Jared each use the same size and shape of wall to paint pictures.

- Peter uses $\frac{1}{3}$ of the wall to paint his picture.
- Jared uses $\frac{1}{4}$ of the wall to paint his picture.

Which statement is a correct comparison of the part of the wall Peter uses and Jared uses?

a. $\frac{1}{3} = \frac{1}{4}$

b. $\frac{1}{3} + \frac{1}{4}$

c. $\frac{1}{3} < \frac{1}{4}$

d. $\frac{1}{3} > \frac{1}{4}$

Standard: 3.OA.A.2
DOK 2

22   Xavier has 45 lollipops. He gives all of the lollipops to 5 friends. If each friend gets the same number of lollipops. Which of the expressions can be used to find the number of lollipops.

      A. 45 - 5
      B. 45 ÷ 5
      C. 45 x 5
      D. 45 + 5

Standard: 3.OA.A.3
DOK 2

23   Mya earns the same amount of money each day working at the coffee shop. If she earns $108 at the end of 9 days. How much does she make each day?

      A. $117
      B. $10
      C. $12
      D. $13

Standard: 3.NF.A.3a
DOK 1

24 Which number line represents the fraction $\frac{3}{8}$?

a.

b.

c.

d.

25 Choose the number sentence that best represents this array.
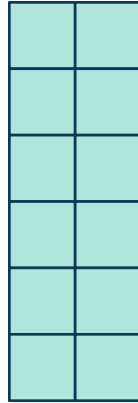
A. 2 + 2 + 2 + 2
B. 2 + 2 + 2 + 2 + 2
C. 6 + 6 + 6 + 6
D. 2 + 2 + 2 + 2 + 2 + 2

5 Multiple Choice
8 Constructed Response

Standard: 3.OA.D.8
DOK 2

26 A coach puts 12 baseballs into one bag and 24 baseballs into another bag. If the coach divides all the baseballs into 6 equal groups. How many baseballs will there be in each group?

  A. 6 baseballs
  B. 2 baseballs
  C. 4 baseballs
  D. 30 baseballs

Standard: 3.MD.A.1
DOK 2

27 Sydney and Olivia both ran the 1600 meter race. Sydney finished the race 2 minutes before Olivia. If Olivia finished the race at 5:07 PM, what time did Sydney finish the race?

  A. 5:09 PM
  B. 5:09 AM
  C. 5:05 AM
  D. 5:05 PM

Standard: 3.OA.A.3

DOK 2

28 Which statement can describe this expression?

$$56 \div 8$$

A. Lori has 56 gum drops, and she gave 8 of them away.

B. Bobby has 56 tomatoes; he sorts them equally into 7 boxes.

C. Nora has 56 paper plates and wants to give 8 of them to her neighbor.

D. Zoey has 56 hair ties that she sorts equally among her 8 friends.

Standard: 3.NBT.A.3

DOK 1

29 Which expression can be used to represent 640?

A. 6 x 80

B. 6 x 8

C. 8 x 80

D. 8 x 8

Standard: 3.MD.C.7d
DOK 1

30 Myka says her kitchen is rectangular in shape and has an area of 63 meters². Which rectangle can represent the floor plan of her kitchen?

a.
6 m
9 m

b.
9 cm
7 cm

c.
9 cm
6 cm

d.
7 m
9 m
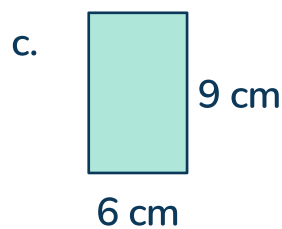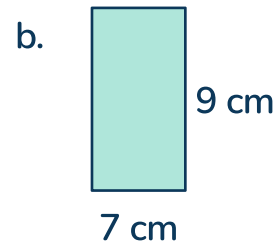
Constructed response questions:

Standard: 3.NBT.A.2
DOK 2
Constructed response - 1 point

31 What number correctly completes the equation?

$$519 + \boxed{} = 532$$

Standard: 3.NF.3.b

DOK 2

Constructed response - 1 point

32 What number makes the comparison true?

$$\frac{3}{4} = \frac{}{8}$$

Standard: 3.NF.A.2

DOK 3

Constructed response - 2 points

33 PART A: Fill in the blanks with the correct fractions.
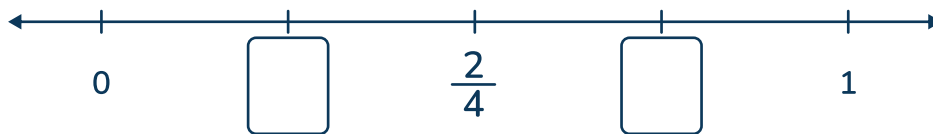
PART B: Explain how to plot the fraction $\frac{3}{2}$.

Standard: 3.NF.A.2

DOK 3

Constructed response - 2 points

33 PART A: Fill in the blanks with the correct fractions.
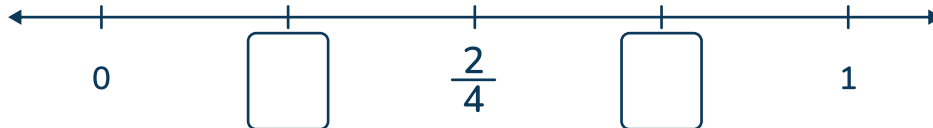
PART B: Explain how to plot the fraction $\dfrac{3}{2}$.

Standard: 3.OA.A.3

DOK 3

Constructed response - 2 points

34 Carly owns a travel volleyball club. He needs to reserve vans to transport 100 volleyball players to their games. If the vans only hold 12 passengers, what is the least amount of vans Carly needs to reserve?

Explain your answer.

Standard: 3.MD.C.7a

DOK 3

Constructed response - 2 point

35 Carmine drew the rectangle below on grid paper. Each unit square equals 1 square unit. Carmine says he can find the area of the rectangle in two ways.

He first writes: 9 + 9 + 9 + 9 + 9 = 45, so the area is 45 square units.

He then writes: 9 x 5 = 45, so the area is 45 square units.

Explain if Carmine is correct or not.
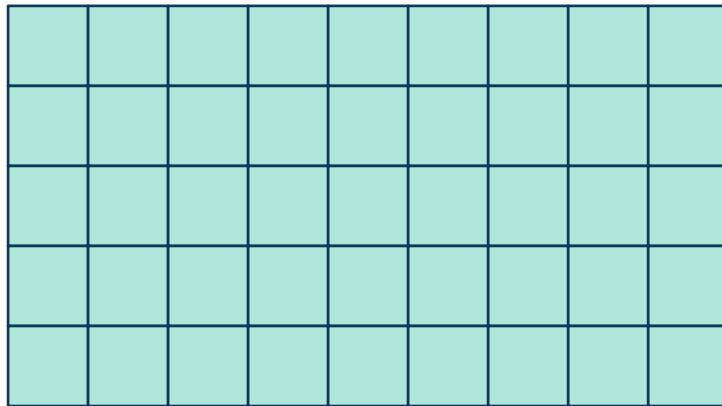
Standard: 3.OA.D.8

DOK 3

Constructed Response - 2 points

36 Joanne is cleaning out the book room in order to donate the books to several senior citizen facilities.
- Box 1 has 34 books.
- Box 2 has 42 books.
- Box 3 has 20 books.

She plans on donating an equal amount of books to 8 different facilities. How many books does each facility get?

Show your work.

Standard: 3.OA.A.3

DOK 3

Constructed response - 2 points

37 Melissa is baking 1 batch of cookies. The table shows the time it takes to do each of the tasks in baking a batch of cookies.

Time	Task
15 minutes	Make the dough
12 minutes	Bake the cookies
3 minutes	Cookies to cool

What is the total amount of time, in minutes, it takes Melissa to make 3 batches of cookies?

Standard: 3.MD.C.7
DOK 3
Constructed response - 3 points

38 Mr. Emmerich wants to display the art projects from both of his classes in one rectangular array on the wall outside his classroom. There are 19 projects in one class and 26 projects in the other class.

Part A: Draw a rectangular array that could represent the arrangement of art projects.

Part B: Find the area of the array. Explain your answer using an equation or equations.

Part C: If three more students hand in projects, how does the array change? Explain.

Answer Key - Multiple Choice

Item number	Correct answer	Standard(s)	DOK
1	B	3.OA.B.5	DOK 2
2	D	3.NF.A.3b	DOK 1
3	A	3.OA.B.5	DOK 2
4	D	3.MD.C.7d	DOK 2
5	A	3.NBT.A.3	DOK 1
6	C	3.OA.A.1	DOK 1
7	D	3.MD.A.2	DOK 2
8	B	3.NBT.A.1	DOK 1
9	A	3.NF.A.2b	DOK 2
10	B	3.G.A.2	DOK 2
11	C	3.OA.D.9	DOK 2
12	D	3.NF.A.2b	DOK 2
13	C	3.OA.B.5	DOK 2
14	C	3.MD.A.2	DOK 1
15	D	3.NF.A.3d	DOK 1
16	D	3.G.A.2	DOK 2
17	A	3.OA.A.4	DOK 1
18	C	3.MD.C.5b	DOK 2
19	B	3.NF.A.3d	DOK 1
20	A	3.MD.A.1	DOK 1

Item number	Correct answer	Standard(s)	DOK
21	D	**3.NF.A.3d**	DOK 2
22	B	**3.OA.A.2**	DOK 2
23	C	**3.OA.A.3**	DOK 2
24	C	**3.NF.A.3a**	DOK 1
25	D	**3.OA.A.1**	DOK 2
26	A	**3.OA.D.8**	DOK 2
27	D	**3.MD.A.1**	DOK 2
28	D	**3.OA.A.3**	DOK 2
29	C	**3.NBT.A.3**	DOK 1
30	D	**3.MD.C.7d**	DOK 1
31	13	**3.NBT.A.2**	DOK 2
32	6	**3.NF.3b**	DOK 2
33	PART A: $\frac{1}{4}$ $\frac{3}{4}$ **PART B: Extend the number line past 1 with the same increments and place a point at 1 2/4 because 3/2 is equal to 1 2/4.**	**3.NF.A.2**	DOK 3
34	**9 buses With explanation**	**3.OA.A.3**	DOK 3
35	**Yes he is correct because the array is 5 rows and 9 columns which can be represented as 9 + 9 + 9 + 9 + 9 or 5 x 9**		DOK 1

Item number	Correct answer	Standard(s)	DOK
36	34+42+20=96 96÷8=12 12 books per facility	**3.OA.D.8**	DOK 3
37	90 minutes (explanation)	**3.OA.A.3**	DOK 3
38	The array is 45 squares. 5 x 9 = 45 (or any combination that gives 45) 3 more art projects make an array that is 48 squares. The original array was 45 so it needs to be reorganized. If it was 5 x 9 it can now be 6 x 8	**3.MD.C.7**	DOK 3

Breakdown of Assessment				
Operations and Algebraic thinking (OA)	Number and Operations in Base Ten (NBT)	Number and Operations - Fractions (NF)	Measurement and Data (MD)	Geometry (G)
NY: (31-43%) This Assessment: 37%	NY: (7-14%) This Assessment: 11%	NY: (18-29%) This Assessment: 24%	NY: (21-32%) This Assessment: 26%	NY:(2-8%) This Assessment: 5%

Rationales

Item	KEY	Rationale
1	A is incorrect	The student did not recognize that 10 is not rewritten as (2 + 5).
	B is correct	10 can be rewritten as 5 x 2. Through the associative property the expression can be rewritten as (5 x 2) x 7.
	C is incorrect	The student recognized that 10 can be rewritten as 2 x 5. However, through the associative property the student did not recognize that 7 should be multiplied to (2 x 5) not added.
	D is incorrect	The student did not recognize that the original statement is multiplication not addition.

Item	KEY	Rationale
2	A is incorrect	If a student draws a visual model, they may think that $\frac{2}{6}$ is close enough to $\frac{1}{2}$ so choose this answer.
	B is correct	Students may see the denominator of 6 and assume this is the correct answer.
	C is incorrect	If a student draws a visual model, they may think that $\frac{2}{6}$ is close enough to $\frac{1}{4}$ so choose this answer.
	D is incorrect	Students understand that that $\frac{2}{6}$ is equal to $\frac{1}{3}$ which they visualize through a model.

Item	KEY	Rationale
3	A is incorrect	To determine the solution, the student has an understanding of adding with regrouping.
	B is correct	The student likely subtracted instead of adding the two given numbers. The student needs to focus on the meaning of math symbols.
	C is incorrect	The student likely used the standard algorithm, but did not add the regrouped hundred to the addition problem.
	D is incorrect	The student likely used the standard algorithm to add correctly, but when adding the digits in the ten thousands place, the student made a careless error and added 6 + 7 = 14.

Item	KEY	Rationale
4	A is incorrect	The student added only the values on the diagram. Misunderstanding that the area is not perimeter.
	B is correct	The student found the missing dimensions and found the perimeter instead of the area.
	C is incorrect	The student attempted to find the area by decomposing the figure incorrectly, (7 x 15)+(6 x 14)
	D is incorrect	The student correctly decomposed the figure into two rectangles where one is 7 by 15 and the other is 7 by 6. (7 x 15) + (7 x 6) = 147

New York Practice Test | Grade 3 | Rationales

Item	KEY	Rationale
5	A is correct	The student understands how to multiply a one digit number to a multiple of 10.
	B is incorrect	The student added the numbers instead of multiplying them.
	C is incorrect	The student only multiplied 6 x 9 not 6 x 90.
	D is incorrect	The student added 60 and 90.

Item	KEY	Rationale
6	A is incorrect	The student likely miscounted the number of rows.
	B is incorrect	The student likely miscounted the number of columns.
	C is correct	The student understands that a 4 x 6 array is four rows and 6 columns.
	D is incorrect	The student likely miscounted the number of rows.

Item	KEY	Rationale
7	A is incorrect	To determine the solution, the student has an understanding of adding with regrouping.
	B is incorrect	The student likely subtracted instead of adding the two given numbers. The student needs to focus on the meaning of math symbols.
	C is incorrect	The student likely used the standard algorithm, but did not add the regrouped hundred to the addition problem.
	D is correct	The student likely used the standard algorithm to add correctly, but when adding the digits in the ten thousands place, the student made a careless error and added 6 + 7 = 14.

New York Practice Test | Grade 3 | Rationales

Item	KEY	Rationale
8	A is incorrect	The student did not apply the rounding rule correctly and rounded down.
	B is correct	The student correctly rounded the number.
	C is incorrect	The student rounded to the wrong digit and applied the rounding rule incorrectly.
	D is incorrect	The student used the correct rounding rule, but rounded to the nearest ten instead of hundred.

Item	KEY	Rationale
9	A is correct	To figure out the correct fraction, the student understood that the number line was divided into fourths between 0 and 1 and that Point P was on $\frac{1}{4}$
	B is incorrect	The student likely miscounted the amount of equal parts between 0 and 1 and/or saw the $\frac{1}{3}$ as being the correct point because it was 1 space passed 0.
	C is incorrect	The student likely miscounted the amount of equal parts between 0 and 1 and/or miscounted the spaces from 0.
	D is incorrect	The student correctly identified the parts of the number line being divided into fourths but miscounted the spaces from 0.

New York Practice Test | Grade 3 | Rationales

Item	KEY	Rationale
10	A is incorrect	The student does not have an understanding that the equal pieces represent the denominator of the fraction.
	B is correct	To determine the correct fractional part, the 6 equal pieces are the denominator and the 1 piece she uses is the numerator. So the fractional part is $\frac{1}{6}$
	C is incorrect	The student does not have an understanding that the equal pieces represent the denominator of the fraction.
	D is incorrect	The student does not have an understanding that the equal pieces represent the denominator of the fraction.

Item	KEY	Rationale
11	A is incorrect	Students may recognize the numbers as multiples of 3 and think that the rule is to divide by 3.
	B is incorrect	Students may look at the list of numbers backwards and think it's adding by 3.
	C is correct	Students look at the list of numbers correctly and recognize that the rule is to subtract by 3 from number to number.
	D is incorrect	Students may recognize the numbers as multiples of 3 and think that the rule is to multiply by 3.

Item	KEY	Rationale
12	A is incorrect	The student likely looked at the number line backwards.
	B is incorrect	The student likely counted the spaces incorrectly.
	C is incorrect	The student likely counted the spaces incorrectly.
	D is correct	The student understood that ⅚ from 0 is 5 spaces.

Item	KEY	Rationale
13	A is incorrect	The student most likely interpreted the situation as applying the associative property of addition.
	B is incorrect	The student most likely interpreted the situation as applying the associative property of multiplication.
	C is correct	The student understood the situation as $4 \times 6 + 4 \times 6$ which is the same as $4 \times (6 + 4)$ correctly applying the distributive property.
	D is incorrect	The student most likely misinterpreted the distributive property by thinking the situation was $(4 + 6) \times (4 + 4)$

Item	KEY	Rationale
14	A is incorrect	The student most likely added the numbers together.
	B is incorrect	The student interpreted the question correctly to multiply but most likely multiplied incorrectly.
	C is correct	The student interpreted the question correctly to multiply and multiplied correctly.
	D is incorrect	The student interpreted the question correctly to multiply but most likely multiplied incorrectly.

New York Practice Test | Grade 3 | Rationales

Item	KEY	Rationale
15	A is incorrect	The student most likely chose this answer because 3 parts are shaded out of 8. Misunderstanding of the meaning of equivalent fractions.
	B is incorrect	The student most likely chose this answer because, again, there are 3 parts shaded out of 8. Misunderstanding of the meaning of equivalent fractions.
	C is incorrect	The student most likely miscounted the number of parts shaded. This one is 5 out of 8 instead of 6 out of 8.
	D is correct	The student correctly interpreted that 6 shaded parts out of 8 is equivalent to 3 out of 4.

Item	KEY	Rationale
16	A is incorrect	The student most likely selected this answer because they saw the 4 parts.
	B is incorrect	The student most likely selected this answer because they saw the 4 parts.
	C is incorrect	The student most likely selected this answer because they saw the 4 parts.
	D is correct	This is the correct answer because the four parts are equal in size.

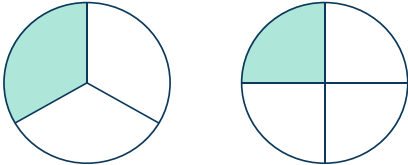| Item	KEY	Rationale
17	A is correct	Students correctly select the number 6. $7 \times 6 = 42$ and $42 \div 7 = 6$
	B is incorrect	Students may choose this answer if they are not strong with math facts.
	C is incorrect	Students may choose this answer if they are not strong with math facts.
	D is incorrect	Students may choose this answer if they are not strong with math facts.

Item	KEY	Rationale
18	A is incorrect	Students may choose this answer because the numerical value of the perimeter and area is 18 for both perimeter and area. The units are incorrect in this case.
	B is incorrect	Students may choose this answer if they do not have a strong understanding of perimeter and area.
	C is correct	The perimeter is 6 + 6 + 3 + 3 = 18 units The area is 6 x 3=18 units²
	D is incorrect	Students may choose this answer because the perimeter is correct but the area is incorrect. If their understanding of area is incorrect, 3+6=9 instead of 3 x 6=18.

Item	KEY	Rationale
19	A is incorrect	Students may choose this answer if they assume equivalence based on the same numerators.
	B is correct	To determine this answer, students need to recognize that 2 eighths are shaded in the rectangle, and that is the same as 1 fourth because there are 4 groups of 2 eights in the whole, and one of those groups is shaded.
	C is incorrect	Students may choose this answer if they assume equivalence based on the same denominators.
	D is incorrect	Students may choose this answer if they assume equivalence based on the fact that there is a 2 in each fraction.

Item	KEY	Rationale
20	A is correct	The student correctly identifies the time on the clock to be 3:07.
	B is incorrect	A student may choose this answer because the time is close to 3:05.
	C is incorrect	A student may choose this answer because the time is close to 3:10.
	D is incorrect	A student may choose this answer if they miscount the minutes.

Item	KEY	Rationale
21	A is incorrect	Students may choose this answer if they do not have a strong understanding of unit fractions.
	B is incorrect	Students may choose this answer if they do not have a strong understanding of unit fractions.
	C is incorrect	Students may choose this answer if they confuse a greater than sign with a less than sign.
	D is correct	The unit fraction $\frac{1}{3}$ is greater than $\frac{1}{4}$. Making a model helps to visualize that 1 part of a third is bigger than 1 part of a fourth.

Item	KEY	Rationale
22	A is incorrect	Students may choose this answer if they do not have a strong understanding of math vocabulary and interpret "each friend" with subtraction.
	B is correct	This is the correct answer because there are 45 lollipops and each friend gets the same amount implying equal groups of 5. $45 \div 5 = 9$
	C is incorrect	Students may choose this answer if they do not have a strong understanding of math vocabulary and interpret "each friend" with multiplication.
	D is incorrect	Students may choose this answer if they do not have a strong understanding of math vocabulary and interpret "each friend" with addition.

Item	KEY	Rationale
23	A is incorrect	The students may select this answer if they do not have a strong understanding of math vocabulary and add the dollar amounts together.
	B is incorrect	The student may choose this answer if they do not have a strong understanding of math facts.
	C is correct	This is the correct answer because the operation of division has to be used to find out how much Maya makes each day. $108 \div 9 = 12$
	D is incorrect	A student may choose this answer if they do not have a strong understanding of math facts.

New York Practice Test | Grade 3 | Rationales

Item	KEY	Rationale
24	A is incorrect	The student may choose this if they do not have a strong understanding of fractions on the number line or they counted 3 spaces from 1. The point is on $\frac{5}{8}$ not $\frac{3}{8}$.
	B is incorrect	The student may choose this if they do not have a strong understanding of fractions on the number line or counted the spaces incorrectly. The point is on $\frac{4}{8}$ not $\frac{3}{8}$.
	C is correct	This is the correct answer because the point is placed correctly on $\frac{3}{8}$ which is the third space from 0.
	D is incorrect	The student may choose this if they do not have a strong understanding of fractions on the number line or counted the spaces incorrectly. The point is on $\frac{2}{8}$ not $\frac{3}{8}$.

Item	KEY	Rationale
25	A is incorrect	The student most likely miscounted the number of rows.
	B is incorrect	The student most likely miscounted the number of rows.
	C is incorrect	The student most likely does not have a strong understanding of arrays.
	D is correct	This is the correct answer because there are 6 rows of 2, so 2+2+2+2+2+2 is correct.

Item	KEY	Rationale
26	A is correct	This is the correct answer. The student correctly added 12 + 24 to get a total of 36 baseballs and then divided 36 by 6 to get 6 baseballs per group.
	B is incorrect	The student most likely chose this answer because they only divided 12 by 6 to get 2 baseballs per group.
	C is incorrect	The student most likely chose this answer because they only divided 24 by 6 getting 4 baseballs per group.
	D is incorrect	The student most likely chose this answer because they added 12 and 24 correctly to get 36 but then subtracted by 6 instead of dividing by 6.

Item	KEY	Rationale
27	A is incorrect	The student most likely chose this answer because they added 2 minutes instead of subtracting the 2 minutes.
	B is incorrect	The student most likely chose this answer because they added the 2 minutes instead of subtracting the 2 minutes and confused AM with PM.
	C is incorrect	The student most likely chose this answer because they subtracted the minutes correctly but confused AM with PM.
	D is correct	This is the correct answer. 5:07 PM minus 2 minutes is 5:05 PM.

Item	KEY	Rationale
28	A is incorrect	The student may have chosen this answer because they do not have a strong understanding of interpreting words into math expressions, "giving away" implies subtracting.
	B is incorrect	The student may have chosen this answer because they realized it represented division but confused 8 with 7.
	C is incorrect	The student may have chosen this answer because they do not have a strong understanding of interpreting words into math expressions, "give" implies subtracting.
	D is correct	This is the correct answer. Zoey is sorting 56 hair ties equally among her friends, which implies to divide.

Item	KEY	Rationale
29	A is incorrect	The student may choose this answer if they do not have a strong command of math facts.
	B is incorrect	The student may choose this answer if they do not have a strong command of math facts and multiplying by multiples of 10.
	C is correct	This is the correct answer because $8 \times 8 = 64$ so 8×80 is 640.
	D is incorrect	The student may choose this answer if they do not have a strong understanding of multiplying by multiples of 10. $8 \times 8 = 64$ not 640.

Item	KEY	Rationale
30	A is incorrect	The student most likely chose this answer because they do not have strong math facts.
	B is incorrect	The student most likely chose this answer because they do not have strong math facts as well as not being mindful of the units.
	C is incorrect	The student most likely chose this answer because they were not mindful of the units.
	D is correct	This is the correct answer because 9m x 7m=63m²

Item	KEY	Rationale
31	1 point	The student correctly identified 13 as being the that correctly completes the equation.
	0 points	The student does not show an understanding of adding the numbers and then dividing.

Item	KEY	Rationale
32	1 point	The student correctly identified 6 as being the correct number.
	0 points	The student does not show an understanding of adding the numbers and then dividing.

Item	KEY	Rationale
33	2 point	The student correctly places the missing fractions, $\frac{1}{4}$ and $\frac{3}{4}$, on the number line and correctly explains how to plot the number $\frac{3}{2}$
	1 points	The student correctly places the missing fractions, $\frac{1}{4}$ and $\frac{3}{4}$, on the number line, but cannot explain how to plot $\frac{3}{2}$ OR The student makes a minor error placing the missing fractions on the number, but does explain how to plot $\frac{3}{2}$.
	0 points	The student does not show an understanding of adding the numbers and then dividing.

Item	KEY	Rationale
34	2 point	The student correctly demonstrates division through drawings, explanations using multiplication, etc.. Students also demonstrate that 9 buses need to be reserved as opposed to 8 buses.
	1 points	The student correctly demonstrates division through drawings, explanations using multiplication, etc.. However, the student states that 8 buses need to be reserved.
	0 points	The student does not show an understanding of adding the numbers and then dividing.

Item	KEY	Rationale
35	2 point	The student explains that Carmine is correct.
	1 points	The student says Carmine is correct but does not provide a thorough explanation or any explanation at all.
	0 points	The student does not demonstrate understanding.

New York Practice Test | Grade 3 | Rationales

Item	KEY	Rationale
36	2 point	The student correctly adds: 34 + 42 + 20 = 96 , using any strategy. Then correctly divides, 96 ÷ 8 = 12, using any strategy. Showing that there are 12 books going to each of the facilities.
	1 points	The student correctly adds: 34 + 42 + 20 = 96 , using any strategy, and makes an error when dividing. OR The Student makes a minor error adding the numbers, using any strategy, and then that causes the division to be incorrect.
	0 points	The student does not show an understanding of adding the numbers and then dividing.

Item	KEY	Rationale
37	2 point	To receive 2 points, students need to sum 15 + 12 + 3 = 30 minutes 1 batch of cookies takes 30 minutes. 3 batches of cookies takes three times that amount of time. 3 x 30 = 90 minutes.
	1 points	Students will receive 1 point if they find the time to make one batch. OR Demonstrates understanding but makes a minor errors
	0 points	Students will receive 0 points if they leave the response blank, or if they do not write a correct expression or solve correctly.

Item	KEY	Rationale
38	3 point	In order to receive 3 points, students have Part A, Part B, and Part C answered correctly. 19 + 26 = 45 Rectangular array of 45. So the array can be any dimension that multiplies to be 45. Example: 5 x 9 = 45
	2 points	In order to receive 2 points, students may have two of the 3 parts answered correctly. OR All 3 parts answered with minor errors.
	1 points	To receive 1 point, students have only 1 part answered correctly.
	0 points	To receive 0 points, the student must leave the answer blank or get no parts of the problem correct.

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