

Next Generation NY Math Rehearsal[®] Plus Instruction

Teacher's Guide and Extended Answer Key

LEVEL

D



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Instructional Practice with Guides

- 1 A Standard: 4.NF.4b
Guide: When multiplying by a whole number, the whole number has a denominator of 1.
- 2 C Standard: 4.OA.4
Guide: A factor is a number that can be used to make that number when multiplying.
- 3 D Standard: 4.OA.3
Guide: When calculating, make sure to multiply before adding.
- 4 A Standard: 4.MD.6
Guide: When using the protractor, determine which answer to choose by deciding if the angle is acute or obtuse.
- 5 B Standard: 4.NBT.4
Guide: Remember to regroup when the number on the bottom is greater than the number on the top.
- 6 C Standard: 4.NF.1
Guide: To find an equivalent fraction, multiply the numerator and denominator by the same number.
- 7 A Standard: 4.MD.5a
Guide: Each quarter of a circle is 90-degrees.
- 8 B Standard: 4.NF.2
Guide: If the numerators of a fraction are the same, then the smaller the denominator, the greater the fraction.
- 9 D Standard: 4.OA.5
Guide: To find the rule look at the first two terms. The options are either multiply by 2 or add 3. Then look at terms two and three and see which rule continues to work.
- 10 C Standard: 4.MD.4
Guide: Total the number of hours represented by each X:
$$1 + 1\frac{1}{2} + 2 + 2 + 2 + 2\frac{1}{2} + 3$$

- 11 B Standard: 4.MD.5a
Guide: Each quarter of a circle is 90-degrees.

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- 12 **Answer:** 29,000

Guide: Look to the right of the hundreds place. If the number is five or greater, the hundreds place goes up one more.

Standard: 4.NBT.3

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- 13 **Answer:** Figure B

Explanation: because the two lines form right angles

Guide: Perpendicular lines must form right angles. Intersecting lines form any other type of angle.

Standard: 4.G.1

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- 14 **Show Your Work:** Back Fence = 192 square feet; Front Fence = 112 square feet;
Difference between the two fences = 80 square feet

Guide: Area is found by multiplying length by width.
To compare the two areas, subtract.

Answer: 80 square feet

Standard: 4.G.1, 4.MD.3

Answer Key

Rehearsal Test 1, Session 1

Multiple-Choice Questions are worth 1 point each.

Question	Answer	Learning Standard	Question	Answer	Learning Standard
1	D	4.OA.2	21	D	4.OA.4
2	B	4.NF.1	22	B	4.NBT.2a
3	D	4.MD.4	23	B	4.G.2b
4	C	4.NF.2	24	B	4.OA.4
5	D	4.G.2a	25	B	4.NBT.3
6	C	4.NBT.1	26	D	4.OA.5
7	C	4.NF.3a	27	C	4.NBT.2b
8	B	4.G.3	28	C	4.G.3
9	A	4.OA.3	29	D	4.NBT.6
10	B	4.NF.3a, 4.NF.4a	30	A	4.MD.6
11	A	4.NBT.3			
12	D	4.NF.3c			
13	C	4.MD.5b			
14	A	4.OA.3a			
15	B	4.NBT.2a			
16	C	4.NF.3c			
17	B	4.OA.4			
18	B	4.NF.3c			
19	C	4.NBT.2b			
20	B	4.G.1			

Rehearsal Test 1, Session 2

Multiple-Choice Questions are worth 1 point each.

Question	Answer	Learning Standard
1	B	4.NBT.5
2	A	4.NF.4b
3	D	4.NF.3c
4	B	4.NF.4a
5	B	4.NBT.6

Each part of a Short-Response Question is worth 1 point.

- 6 **Answer:** Angle M = 55°
 Angle N should measure 90° .
 (Allow 3° for error, meaning acceptable answers can range from 87° to 93°)

[Please note: the equation editor used for the NY State tests does not include the “degree” symbol ($^\circ$). Students may type out the word “degrees” or access the symbol by typing option+shift+8.]

4.MD.6

- 7 **Show Your Work:** Students should show $14 \times 12 = 168$ or equivalent work.

Answer: 168 bagels

4.NBT.5

- 8 **Answer:** Student should draw a number line with a point at $\frac{3}{12}$.

4.G.1

- 9 **Show Your Work:** City A 64,305 < City B 64,315

Answer: Possible Explanation: City B is greater than City A because City B has a one in the tens place when City A has a zero in the tens place.

4.NBT.2b

- 10 **Answer:** $\frac{8}{12}$ and 4 more pieces

Explanation: Possible Explanation: Find the equivalent fraction by multiplying the numerator and denominator by 4.

4.NF.2

- 11 **Show Your Work:** $\frac{1}{3} \times 5$ OR $5 \times \frac{1}{3}$

Scorer should NOT accept any answers with an equal sign, as the question asks for an expression and NOT an equation.

Answer: Alex traveled $\frac{5}{3}$ miles or $1\frac{2}{3}$ miles.

4.NF.4c

- 12 **Show Your Work:** Work that shows a reasonable path to the answer $14\frac{8}{5}$ or $15\frac{3}{5}$

Most reasonable work includes: $3\frac{1}{5} + 3\frac{1}{5} + 4\frac{3}{5} + 4\frac{3}{5}$

Answer: $15\frac{3}{5}$ feet

4.NF.3d

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- 13 **Show Your Work:** Students should show work that shows a reasonable path to the answer 7 tickets.

Answer: 7 tickets

4.OA.5

Each part of the Extended-Response Question is worth 1 point.

- 14 **Show Your Work:** Chocolate Chips: $1,600 \times 8 = 12,800$
Peanut Butter: $2,400 \times 6 = 14,400$
 $12,800 + 14,400 = 27,200$

Answer: 27,200 total cookies

4.NBT.5

Rehearsal Test 2, Session 1

Multiple-Choice Questions are worth 1 point each.

Question	Answer	Learning Standard	Question	Answer	Learning Standard
1	C	4.OA.2	16	D	4.OA.5
2	B	4.G.1	17	C	4.NBT.3
3	D	4.NF.2	18	B	4.OA.3a
4	C	4.OA.4	19	C	4.NBT.2
5	A	4.NF.3c	20	D	4.OA.2
6	A	4.NBT.5	21	A	4.NBT.6
7	D	4.OA.4	22	B	4.G.1
8	A	4.MD.7	23	D	4.MD.6
9	D	4.NF.4b	24	C	4.NBT.5
10	C	4.NBT.3	25	C	4.NBT.4
11	A	4.NF.1	26	B	4.NF.1
12	C	4.OA.4	27	C	4.OA.4
13	B	4.NBT.1	28	C	4.G.3
14	A	4.NF.3a	29	B	4.NBT.6
15	D	4.G.2a	30	B	4.NF.2

Rehearsal Test 2, Session 2

Multiple-Choice Questions are worth 1 point each.

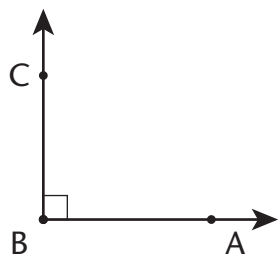
Question	Answer	Learning Standard
1	B	4.MD.4
2	D	4.NF.3a
3	D	4.G.3
4	C	4.NF.3b
5	D	4.MD.3

Each part of a Short-Response Question is worth 1 point.

6 **Answer:** rectangle
4.G.1

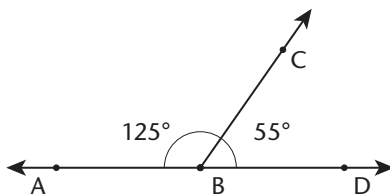
7 **Answer:** To get the full point, the student should type BOTH:
eight times as many as three < nine times as many as five
AND
two less than eight = twelve divided by two
4.OA.1

8 **Answer:**



4.G.1

9 **Show Your Work:** Students should show $180^\circ - 125^\circ = 55^\circ$ or equivalent work.



[Please note: the equation editor used for the NY State tests does not include the “degree” symbol ($^\circ$). Students may type out the word “degrees” or access the symbol by typing option+shift+8.]

Answer: Angle CBD measures 55° .
4.MD.7

10 **Show Your Work:** Point A represents $1\frac{1}{3}$; Point B represents $2\frac{2}{3}$; $2\frac{2}{3} - 1\frac{1}{3} = 1\frac{1}{3}$

Answer: $1\frac{1}{3}$
4.NF.3d

- 11 **Show Your Work:** $23,856 + 27,452 = 51,308$
Answer: The company did reach their goal.
Explain: 51,308 is greater than 50,000.
 4.NBT.4

- 12 **Show Your Work:** $\$18 \times 4 \text{ weeks} \times 6 \text{ months} = 432$
 $648 - 432 = \$216$
Answer: She needs to save \$216.
 4.NBT.5

- 13 **Show Your Work:** $16 \times 9 = 144$
 $144 - 87 = 57$
Answer: 57 more square feet of tile
 4.MD.3

Each part of the Extended-Response Question is worth 1 point.

- 14 **Show Your Work:** Short Tower: $\frac{3}{5} \times 5 = \frac{15}{5} \text{ inches} = 3 \text{ inches}$
 Tall Tower: $\frac{3}{5} \times 12 = \frac{36}{5} \text{ inches} = 7\frac{1}{5} \text{ inches}$
 $\frac{36}{5} - \frac{15}{5} = \frac{21}{5} \text{ inches OR } 7\frac{1}{5} - 3 = 4\frac{1}{5} \text{ inches}$
Answer: The difference between the heights of the towers is $4\frac{1}{5}$ inches.
 4.NF.4c