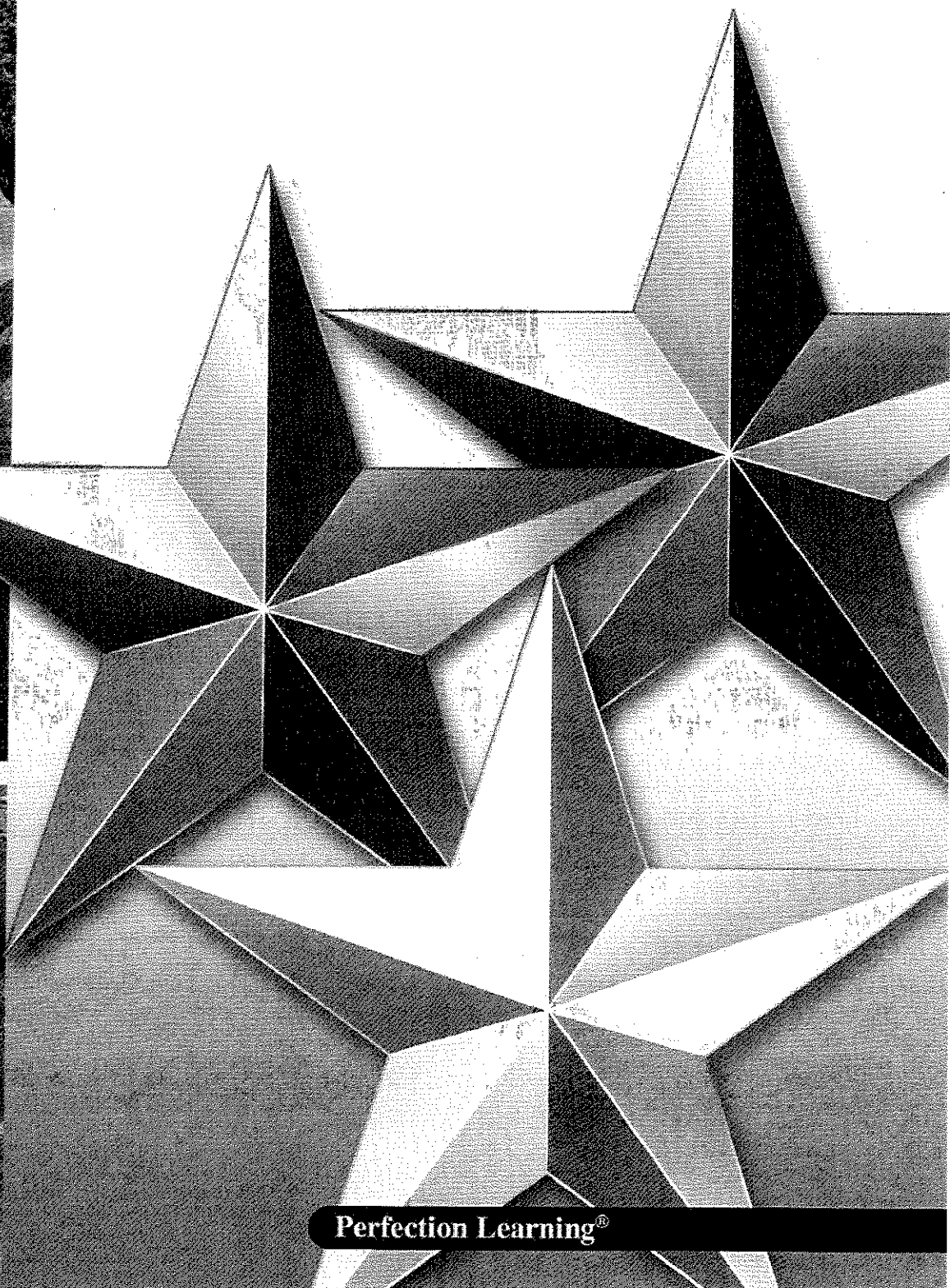
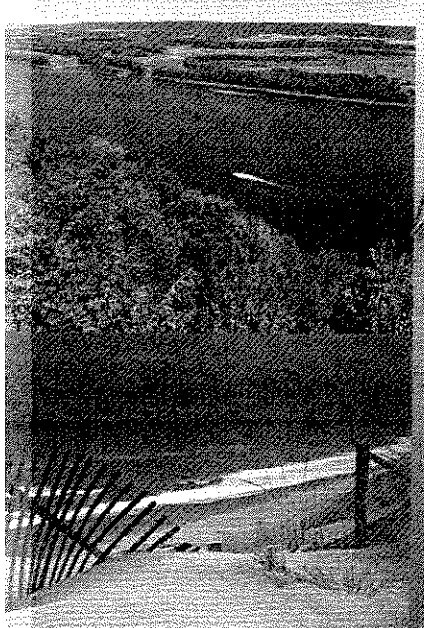


Review,  
Practice,  
& Mastery of

Teacher Guide • Grade 3

# COMMON CORE MATHEMATICS STATE STANDARDS



Perfection Learning®

# Answer Key

## Tryout Test (p. 5)

1. D
2. C
3. C
4. A
5. C
6. B
7. C
8. B
9.  $30 \div 5 = 6$  or  $30 \div 6 = 5$
10. 8
11. B
12. A
13. *Answers will vary.* Story problems should reflect  $56 \div 8$ .
14. 34. *Sample explanation:* I started with 14 and determined that the difference between 19 and 14 is 5. To make sure, I added 5 to 19 and got 24. So I added 5 to 29 to get the answer 34.
15. A
16. D
17. A
18. D
19. D
20. C
21. B
22. =. *Sample illustration:* Student picture should illustrate that  $\frac{5}{5} = 1$ .
23. C
24. D
25. D
26. A
27. C
28. B
29. C
30. A
31. B
32. 50 minutes
33. C
34. C

35. C
36. D
37. B
38. B
39. D
40. D
41. C
42. D
43. C
44. B
45. B
46. B
47. 10 square inches
48. 8 square inches
49. 18 square inches. *Sample explanation:* I figured the area of the shaded rectangle by multiplying the length times the width (2 inches times 5 inches) and the unshaded rectangle by multiplying 4 inches times 2 inches. Then I added the area of the shaded rectangle to the unshaded rectangle (10 square inches plus 8 square inches) to get the total area of 18 square inches.

50. C
51. Shape should be divided into 4 equal parts with three parts shaded.
52. D

## Unit 1: Number Sense

### Examples (p. 16)

1. C
2. C
3. A
4. D
5. A
6. C
7. A
8. A

9. C
10. B
11. A

## Try It (Unit 1)

1. 30 cookies
2. C
3. D
4. A
5. 12 problems. *Sample drawing:* Students should draw 3 rows of 4 X's.
6. D
7. 3
8. B
9. 5. *Sample drawing:* Students should draw 5 groups with 2 mittens each.
10. 6
11. 17
12. C
13.  $7 \times 8 = 56$   
 $8 \times 7 = 56$
14. B
15. B
16. 16
17. Commutative Property
18. true. *Sample answer:* The identity property says that the product of any number and 1 is that number.
19. B
20. A
21. C

## Test Practice 1 (p. 25)

1. D
2. C
3. 9
4. D
5. B
6. D
7. B
8. C
9. B



10.  $50 \div 5 = 10$  CDs
11.  $3 \times 7 = 21$   
 $21 \div 3 = 7$   
 $21 \div 7 = 3$
12. D
13. B
14. D

### Unit 2: Algebraic Thinking

#### Examples (p. 28)

1. A
2. D
3. \$39. *Sample explanation:*  
 I multiplied \$5 times  
 3 hours to get her earnings  
 for babysitting (\$15). I  
 multiplied \$12 times  
 2 lawns to get her earnings  
 for lawn mowing (\$24).  
 Then I added \$15 and \$24  
 to total her earnings.
4. C
5. C
6. D

#### Try It (Unit 2)

1. C
2. B
3. 90¢
4. C
5. \$31
6. B
7. 40
8. ten
9. 12
10. 30, 40

#### Test Practice 2 (p. 33)

1. C
2. D
3. C
4. 58. *Sample explanation:*  
 I started with 62 people  
 and subtracted 14 who got  
 off ( $62 - 14 = 48$ ). Then I  
 added the 10 people who  
 got back on the train to get  
 the total ( $48 + 10 = 58$ ).

5. 15 seeds

Weeks	1	2	3	4
Bottles	4	8	12	16

7. 7
8. 14
9. B
10. A

### Unit 3: Whole Number Operations

#### Examples (p. 35)

1. C
2. D
3. B
4. B
5. C
6. B
7. D
8. \$90

#### Try It (Unit 3)

1. D
2. A
3. C
4. B
5. 314
6. D
7. C
8. \$1,226
9. A
10. B
11. B
12. A
13. 1,592 and 5,695
14. 7,012
15. B
16. 300
17. 8,000
18. B
19. C
20. C

#### Test Practice 3 (p. 42)

1. B
2. C
3. A
4. B
5. D
6. C

7. D
8. 2,603
9. B
10. B

### Unit 4: Fractions

#### Examples (p. 44)

1. D
2. D
3. B
4. C
5. C
6. B
7. A
8. A
9. A
10. A

#### Try It (Unit 4)

1. C
2. D
3.  $\frac{2}{3}$
4.  $\frac{4}{10}$
5.  $\frac{2}{6}$
6. D
7. D
8.  $\frac{1}{2}$  and  $\frac{3}{6}$
9. B
10. D
11. D
12.  $>$
13.  $<$
14.  $<$

#### Test Practice 4 (p. 52)

1. A
2. B
3. C
4. C
5. B
6. D
7. B
8.  $<$ . *Sample drawing:*  
 Students should draw two  
 same-sized shapes, one  
 divided into 3 equal parts  
 with 2 shaded and the  
 other divided into 4 equal  
 parts with 3 shaded.

9. A

10. A *Sample explanation:*  $\frac{3}{8}$  and  $\frac{6}{8}$  should both be shown on the number line, illustrating that  $\frac{3}{8}$  comes before  $\frac{6}{8}$  and is smaller.

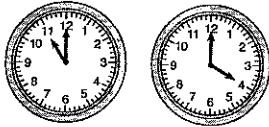
**Unit 5: Time, Volume, and Mass**

**Examples (p. 54)**

1. B
2. 55
3. D
4. D
5. B
6. B

**Try It (Unit 5)**

1. B
2. 7:05
3. A
4. D
5. 5 hours



6. 12:00 p.m.
7. C
8. A
9. C

**Test Practice 5 (p. 59)**

1. D
2. C
3. D
4. 4:41
5. A
6. B
7. C. *Sample answer:* Clock face should show starting time of 2:15 with marks showing 5-minute intervals from the start time for 35 minutes, ending at 2:50.
8. C
9. C
10. C

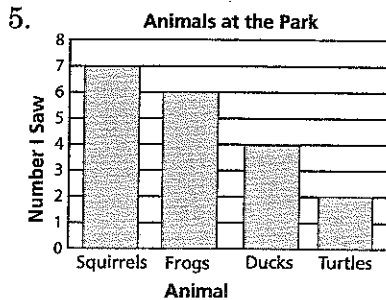
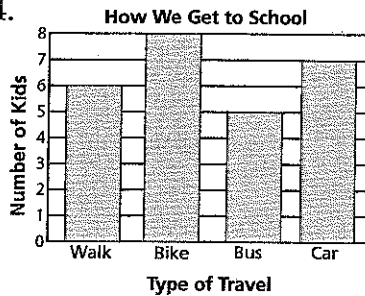
**Unit 6: Length, Plots, and Graphs**

**Examples (p. 61)**

1. A
2. C
3. B
4. B
5. C
6.  $2\frac{1}{2}$  inches
7. D
8. C
9. D

**Try It (Unit 6)**

1. 13
2. 7
3. 3
- 4.



6. C
7. D

**Test Practice 6 (p. 68)**

1. B
2. A
3. B
4. 5 students
5. C
6. A
7. B
8. D
9. D
10. C

**Unit 7: Area and Perimeter**

**Examples (p. 71)**

1. C
2.  $40 \text{ cm}^2$ . *Sample explanation:* To find the area, you have to multiply length times width and the answer is the units squared. The rectangle is 8 centimeters long and 5 centimeters wide ( $8 \text{ cm} \times 5 \text{ cm} = 40 \text{ square centimeters}$ ).
3. C
4. C

**Try It (Unit 7)**

1. B
2. C
3. 28 ft
4. B
5. D

**Test Practice 7 (p. 76)**

1. B
2. 28 ft
3. C
4. C
5. Hong's Poster; 16 inches. *Sample explanation:* To find the perimeter of Maria's poster, I added the 4 sides ( $11 \text{ in.} + 17 \text{ in.} + 11 \text{ in.} + 17 \text{ in.} = 56 \text{ in.}$ ). To find the perimeter of Hong's poster, I added the 4 sides ( $18 \text{ in.} + 18 \text{ in.} + 18 \text{ in.} + 18 \text{ in.} = 72 \text{ in.}$ ). Then to find how much greater Hong's poster's perimeter is, I subtracted ( $72 \text{ in.} - 56 \text{ in.} = 16 \text{ in.}$ ).
6. C
7. D
8. 12 square inches
9. 18 square inches

10. 30 square inches.  
*Sample explanation:*  
 To find the area of the shaded rectangle, I multiplied length times width ( $4 \text{ in.} \times 3 \text{ in.} = 12$  square inches). To find the area of the nonshaded rectangle, I multiplied length times width ( $6 \text{ in.} \times 3 \text{ in.} = 18$  square inches). To find the total area, I added the areas of the two parts (12 square inches + 18 square inches = 30 square inches).

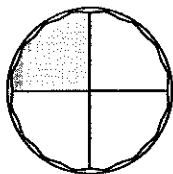
### Unit 8: Geometry

#### Examples (p. 79)

1. D
2. C
3. D
4. *Sample answer:* Shape should be divided into 4 equal parts with 1 part shaded.

#### Try It (Unit 8)

1. C
2. A
3. D
4. A
5. *Sample answer:* All 4 angles are right angles.
6. B
7.  $\frac{1}{4}$



#### Test Practice 8 (p. 84)

1. B
2. C
3. B
4. D
5. B
6. A
7. *Sample answer:* Shape

should be divided into 3 equal parts with 1 part shaded.

8. C

#### Mastery Test (p. 86)

1. D
2. A
3. B
4. B
5. C
6. A
7. B
8. D
9. B
10. A
11. C
12. 50; Add 5
13. A
14. 36 jars. *Sample explanation:*  $8 \times 6 = 48$ ;  $2 \times 6 = 12$ ;  $48 - 12 = 36$  jars left.
15.  $64 \div 8 = 8$ . *Sample answer:* There were 64 jars of paint in 8 boxes. How many jars of paint were in each box?
16. C
17. D
18. C
19. A
20. C
21. A
22. B. *Sample explanation:* I know that 89 is close to 90, so I multiplied 9 times 9 tens, which is 81 tens, or 810.
23. = *Sample answer:* Illustration should show how  $\frac{4}{4} = 1$ , such as two identical shapes, with one divided into 4 equal parts with all parts shaded matching the undivided shape, which should all be shaded.
24. B

25. D
26. B
27. D
28.  $\frac{3}{8}, \frac{4}{8}, \frac{7}{8}$
29. C
30. D
31. C
32. B
33. C
34. D
35. C
36. C
37. B
38. Students should add a bar above Ducks up to 4 and one above Turtles up to 2.
39. C
40. C
41. B
42.  $16 \text{ in}^2$
43.  $12 \text{ in}^2$
44.  $28 \text{ in}^2$  *Sample explanation:* To find the area of the shaded rectangle, I multiplied length times width ( $4 \text{ inches} \times 4 \text{ inches} = 16$  square inches). To find the area of the nonshaded rectangle, I multiplied length times width ( $3 \text{ inches} \times 4 \text{ inches} = 12$  square inches). Finally, to find the total area of the shaded and nonshaded rectangle, I added the areas of the two rectangles. ( $16 \text{ square inches} + 12 \text{ square inches} = 28 \text{ square inches}$ ).
45. A
46. D
47. A
48. C
49. B
50. D
51. D
52. *Sample answer:* shape should be divided into 3 equal parts with 2 shaded.