

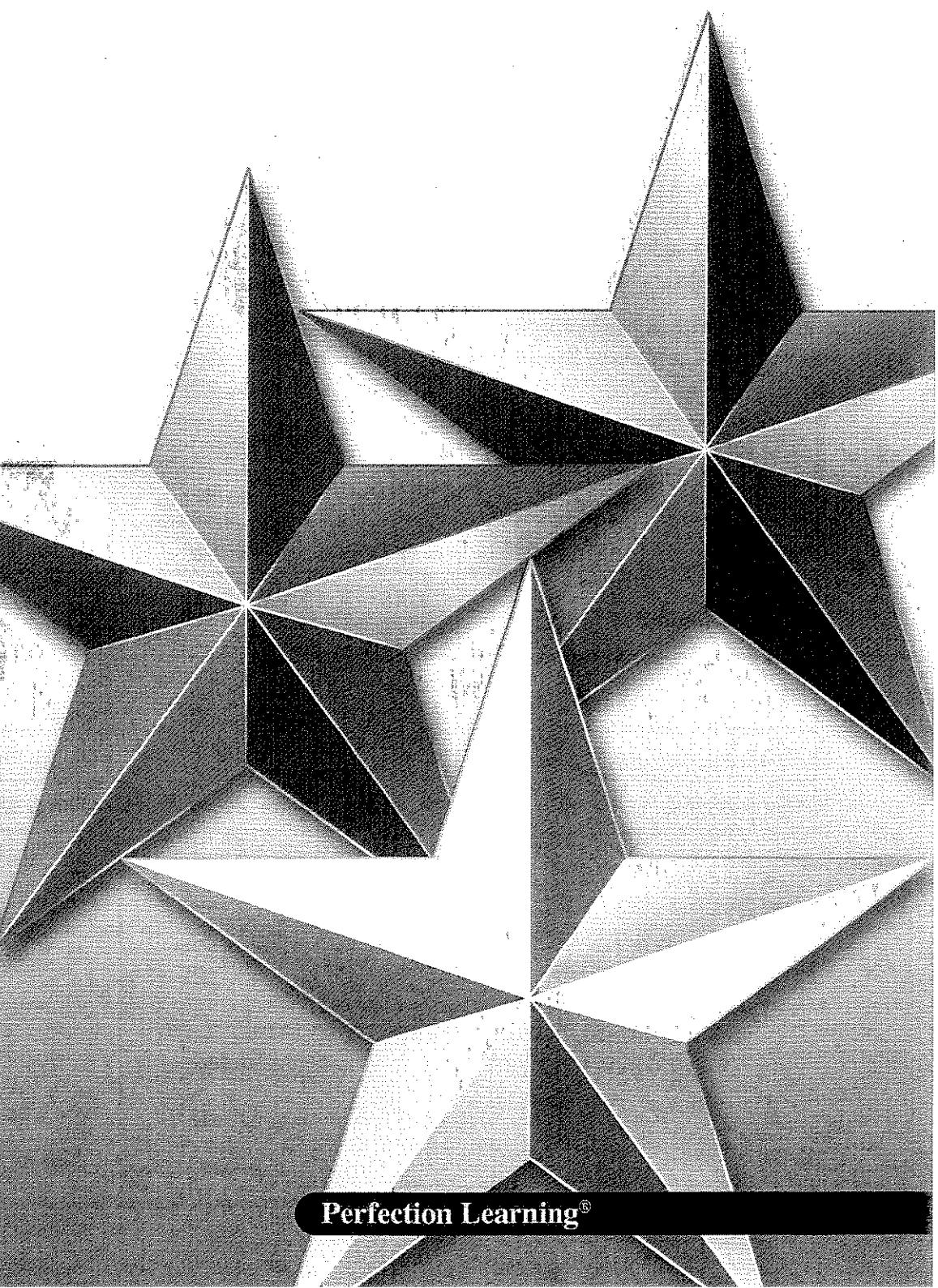
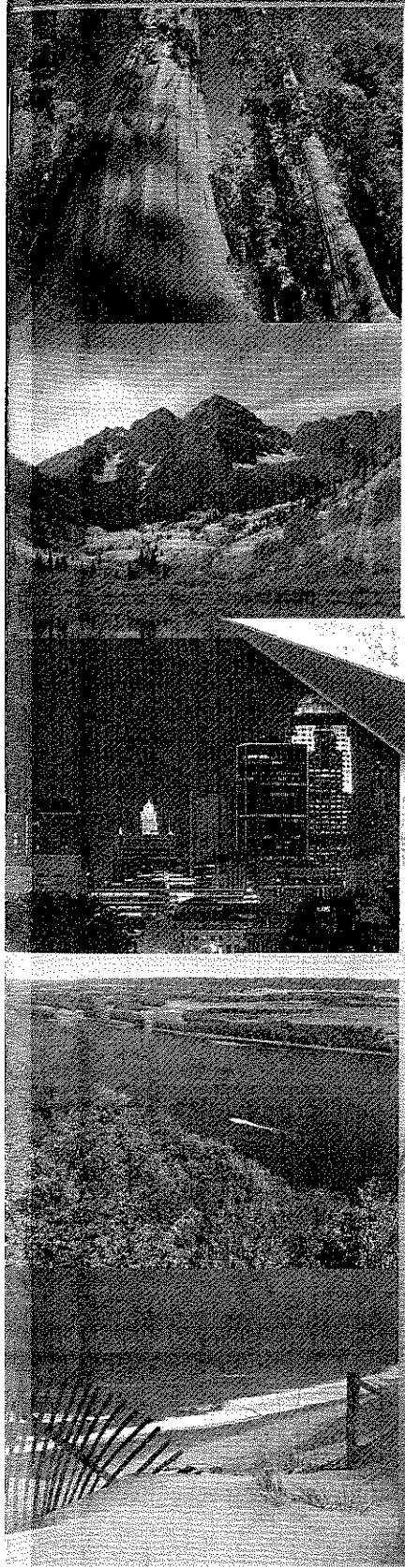
Review,
Practice,
& Mastery of

Teacher Guide • Grade 4

COMMON CORE

MATHEMATICS

STATE STANDARDS



Perfection Learning®

Answer Key

Tryout Test (p. 5)

1. C
2. C
3. A
4. B
5. D
6. C
7. B
8. D
9. B
10. C
11. A
12. B
13. B
14. D
15. C
16. D
17. A
18. A
19. C
20. D
21. B
22. A
23. A
24. A
25. C
26. C
27. D
28. B
29. A
30. B
31. A
32. C
33. A
34. B
35. C
36. B
37. $70,000 + 3,000 + 40 + 2$
38. 1 inch
39. 157
40. 100
41. 95°
42. \$1,644

43. 1,248 ounces
44. 45
45. $90/100$
46. $<$
47. 12 miles
48. *Sample answer:* The quadrilateral has two obtuse angles and two acute angles. It has one pair of parallel sides. It is a trapezoid.
49. *Sample answer:* Pattern: 60, 55, 50, 45, 40, ... I started with 60 so I could subtract a few times. I used the rule *Subtract 5* on 60, $60 - 5 = 55$. Then I used the rule on 55, $55 - 5 = 50$. I kept on using the rule and wrote down each difference.
50. *Sample answer:* One ray of angle ABD goes through zero on the bottom scale of the protractor. I can read the measure where the other ray crosses the bottom scale. The measure of angle ABD is 112° . Angle CBD also has a ray that goes through zero on the bottom scale of the protractor. The other ray crosses the bottom scale at 70° . The measure of angle CBD is 70° . I can subtract to find the measure of angle ABC : $112^\circ - 70^\circ = 42^\circ$.

Unit 1: Number Sense

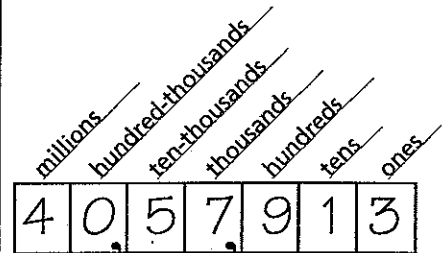
Examples (p. 13)

1. D

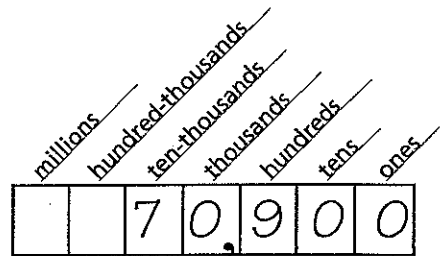
2. A
3. 504,162
4. D
5. A
6. A
7. 350,000
8. C
9. B
10. \$472
11. C
12. 23
13. B
14. B

Try It (Unit 1)

1. D
2. 907,408
3. *thirty-seven thousand, four hundred twenty-three*
- 4.



- 5.



6. 657,208
7. 3,201,191; 3,210,113; 3,211,001
8. 451
9. C
10. 32.01, 32.05, 32.12
11. 675,300; 675,000
12. C



13. 12, 10
14. 22, 18, 17
15. B
16. 4
17. 2,346; 2,350; 2,300
18. C
19. C
20. A
21. 11, 13, 17, 19
22. 2, 3, 5, 7, 11
23. C
24. B
25. A
26. *Suggested answers:* 2×8 ,
 8×2 , 16×1 , 1×16 , 4×4
27. 1, 13
28. 5
29. 1, 2, 3, 4, 6, 12
30. C
31. *Suggested answers:* 1×15 ,
 15×1 , 3×5 , 5×3
32. B
33. B
34. D

Test Practice 1 (p. 25)

1. C
2. A
3. C
4. D
5. D
6. D
7. C
8. D
9. B
10. A
11. C
12. C
13. D
14. D
15. D
16. B
17. B
18. 470,000
19. 1, 2, 4, 8
20. 2

Unit 2: Algebraic Thinking

Examples (p. 27)

1. D
2. B
3. D
4. A
5. C
6. A
7. 10, 18, 26, 34, 42, 50, 58.
Sample explanation: I made up the rule "add 8." I started my pattern with 10 and used the rule to find the other numbers in the pattern.
8. B
9. 5
10. A
11. 6
12. B
13. 9 tricycles. *Sample explanation:* I multiplied the number of boxes by the number of wheels, $7 \times 4 = 28$, to find the number of wheels. I divided the number of wheels by the number of wheels needed for each tricycle ($28 \div 3$) to find the number of tricycles (9) with 1 wheel left over.

Try It (Unit 2)

1. C
2. 15 cans
3. 44
4. D
5. A
6. $4 + p = 25$
7. $3 + p = 5$
8. B
9. 13
10. D
11. $c + 5 = 48$ or $48 - c = 5$
12. B

13. B
14. D
15. A
16. A
17. C
18. 7
19. 23 centimeters
20. C

Test Practice 2 (p. 39)

1. B
2. A
3. A
4. A
5. C
6. C
7. 15, 30, 45
8. 8
9. C
10. odd
11. B
12. B
13. B
14. *Sample story:* Brad needs \$60 to buy a drill. That is 5 times the amount of money he has saved. How much money has he saved?
Sample answer: \$12
Sample explanation: Write $5 \times p = \$60$ as a division equation ($p = \$60 \div 5$). Then divide to solve the equation, $p = \$12$.

Unit 3: Whole Number Operations

Examples (p. 42)

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

9. B
10. A
11. \$1,316
12. C
13. B
14. B

Try It (Unit 3)

1. B
2. C
3. B
4. 1,800 people
5. 1,253 seats
6. B
7. 1,024
8. B
9. C
10. C
11. True, Identity Property of Multiplication
12. true; Identity Property of Addition
13. C
14. 69,000
15. D
16. 2,220 passengers
17. \$11,250
18. 44,175
19. 2,772
20. B
21. D
22. 10
23. \$1,074
24. C
25. 851
26. 26 packages
27. 238 R1
28. D

Test Practice 3 (p. 56)

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

7. 882
8. C
9. C
10. A
11. A
12. C
13. C
14. 391
15. C
16. 8,540 square feet
17. D
18. 730
19. 1000
20. 28 rows. *Sample explanation:* To find the number of plants, I multiplied the number of flats times the number of plants in each flat ($3 \times 48 = 144$ plants). To find the number of rows, I divided the number of plants by 5 ($144 \div 5 = 28, R4$). So, Trayvon can plant 28 rows of strawberries and he will have 4 plants left over.

Unit 4: Fractions and Decimals

Examples (p. 59)

1. C
2. $\frac{30}{100}$
3. D
4. C
5. A
6. C
7. $\frac{3}{7}, \frac{3}{7}$
8. D
9. $3\frac{3}{4}$ cups
10. $2\frac{2}{5}$ kilometers
11. $1\frac{3}{4}$ pounds
12. $2\frac{2}{3}$ yards
13. C
14. $\frac{68}{100}$
15. B

Try It (Unit 4)

1. B
2. D
3. $\frac{4}{5}$
4. $\frac{1}{6}$
5. B
6. B
7. <
8. 3 cups
9. 1
10. A
11. D
12. B
13. $0.18 = \frac{18}{100}$
14. $\frac{2}{5} = 0.4$
15. Students should shade half of the circle.
16. $\frac{8}{3} = 2\frac{2}{3}$
17. 0.001, 0.1, 1.0, 1.01
18. >

Test Practice 4 (p. 70)

1. B
2. D
3. C
4. C
5. A
6. D
7. B
8. C
9. A
10. A
11. A
12. $3 \times \frac{6}{10}, \frac{18}{10}$ or $1\frac{8}{10}$ or $1\frac{4}{5}$
13. A
14. B
15. C
16. $4\frac{7}{10}$



17. $2\frac{6}{8}$ or $2\frac{3}{4}$. Sample explanation: First I subtracted the fractions ($\frac{7}{8} - \frac{1}{8} = \frac{6}{8}$). Then I subtracted the whole numbers ($3 - 1 = 2$). Then I listed the factors common to both 6 and 8 and divided by the largest common factor. ($6 \div 2 = 3$ and $8 \div 2 = 4$).

18. B
19. A
20. D

Unit 5: Measurement and Data

Examples (p. 73)

- A
- D
- C
- The train arrived at 6:45 and traveled 60 miles.
Sample explanation: I counted forward $1\frac{1}{2}$ hours from 5:15 to find the time the train arrived. I multiplied 40 miles per hour times $1\frac{1}{2}$ hours to find the distance the train traveled.
- B
- $\frac{5}{8}$ in.
- 38 ft
- 11 in.
- B
- 12 ft
- B
- 82°
- 155°

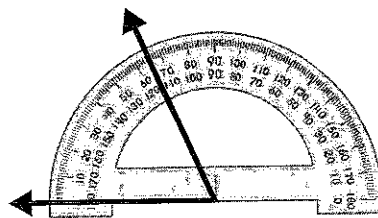
Try It (Unit 5)

- 8 quarts
- C
- A
- C

- D
- B
- 4,000 grams
- A
- 1 hour, 7 minutes
- 4:35 p.m.
- D
- D
- 144 cm^2
- C
- A
- Perimeter: 18 in.
area: 20 in.^2
- Perimeter: 18 in.
Area: 18 in.^2
- the same
- different

Test Practice 5 (p. 83)

- B
- C
- 12 m
- A
- $12\frac{1}{2}$ hours
- B
- B
- B
- D
- C
- 90 min
- $\frac{4}{8}$ or $\frac{1}{2}$ pound
- A
- D
- C
- A
-



Sample answer: I started at the middle point and drew one side of the angle from

there through the zero mark on the left side of the protractor. I used the top scale and moved clockwise to the 60 degree marking. I counted 5 marks to the right of 60 to 65 degrees and drew the second side from the middle point through the 65 degree mark.

Unit 6: Geometry

Examples (p. 86)

- D
- C
- C
- acute
- B
- A
- C
- D
- A
- Sample explanation:* How they are alike: Both have opposite sides parallel, opposite sides equal, opposite angles equal. How they are different: A rectangle has 4 right angles; a rhombus does not. A rhombus has 4 equal sides; a rectangle does not.
- C

Try It (Unit 6)

- U-turn
- Students should draw an acute angle.
- obtuse
- C
- B
- acute
- Students should draw a right triangle, or a triangle with a 90° angle.
- acute, acute, right

9. C
10. B
11. C
12. Students should draw perpendicular lines, or lines that intersect at a right angle.
13. Students should draw a rhombus (opposite angles equal, all sides equal, and opposite sides parallel).
14. D
15. trapezoid
16. rhombus
17. Students should draw two lines of symmetry in the square, either from corner to corner or midside to midside.
18. A
19. Students should draw a line of symmetry, or one that divides the heart in half.
20. Figure A

Test Practice 6 (p. 98)

1. A
2. D
3. A
4. A
5. C
6. D
7. A
8. obtuse
9. B
10. C
11. D
12. A
13. B
14. B
15. A
16. acute

Mastery Test (p. 101)

1. D
2. A
3. B
4. A
5. D
6. D
7. B
8. A
9. D
10. C
11. A
12. B
13. B
14. D
15. B
16. B
17. A
18. D
19. B
20. A
21. A
22. A
23. A
24. C
25. C
26. B
27. B
28. A
29. B
30. D
31. D
32. D
33. B
34. B
35. D
36. C
37. $30,000 + 5,000 + 600 + 9$
38. $\frac{4}{8}$ or $\frac{1}{2}$ pound
39. 144
40. 100
41. 79°
42. \$10,600
43. 744 hours
44. 40
45. $\frac{30}{100}$

46. $>$
47. 3 miles
48. *Sample answer:* The quadrilateral has two obtuse and two acute angles. It has two pairs of parallel sides. It is a parallelogram. 49. Pattern: 42, 48, 54, 60, 66, ... *Sample explanation:* I started with my locker number, 6. I used the rule "add 6" on 42, $42 + 6 = 48$. Then I used the rule on 48, $48 + 6 = 54$. I kept on using the rule and wrote down each sum.
50. Angle ABD is 150° , angle CBD is 90° , and angle ABC is 60° . *Sample explanation:* One ray of angle ABD goes through zero on the bottom scale of the protractor. I can read the measure where the other ray crosses the bottom scale. The measure of angle ABD is 150° . Angle CBD also has a ray that goes through zero on the bottom scale of the protractor. The other ray crosses the bottom scale at 90° . The measure of angle CBD is 90° . I can subtract to find the measure of angle ABC : $150^\circ - 90^\circ = 60^\circ$.

Student-Friendly Rubrics

Student-Friendly 3-point Rubric	
3 points	My answer— <ul style="list-style-type: none"> • is correct and complete. • includes examples from the reading.
2 points	My answer— <ul style="list-style-type: none"> • has some correct and some incorrect information. • includes some examples from the reading.
1 point	My answer— <ul style="list-style-type: none"> • has mostly incorrect information and is not complete. • includes no examples from the reading.
0 points	<ul style="list-style-type: none"> • No answer is given.

Student-Friendly 5-point Rubric	
5 points	My answer— <ul style="list-style-type: none"> • answers every part of the question correctly. • includes examples from the reading. • is easy to read and understand.
4 points	My answer— <ul style="list-style-type: none"> • answers most of the question correctly. • includes examples from the reading. • is mostly easy to read and understand.
3 points	My answer— <ul style="list-style-type: none"> • is partially incorrect. • answers only part of the question. • includes no examples from the reading. • is not easy to read and understand.
2 points	My answer— <ul style="list-style-type: none"> • is mostly incorrect. • answers only part of the question. • includes no examples from the reading. • is difficult to read and understand.
1 point	My answer— <ul style="list-style-type: none"> • is incorrect. • doesn't address the question. • includes no examples from the reading. • is difficult to read and understand.
0 points	<ul style="list-style-type: none"> • No answer is given.