DIRECTIONS:

This section is made up of math problems. Read each problem carefully and then mark your answer on the answer sheet. A sample problem is shown below.

Math Computation Sample S1

S1. If $5(x + 3) = 25$, then $x =$

    A. 10
    B. 5
    C. 2
    D. 1

The correct answer is C. Find Math Computation Sample S1 on your answer sheet. Fill in the circle with the letter C as shown below.

S1. Ⓐ   Ⓑ   ●   Ⓓ

▲ You will have **40 MINUTES** to complete the problems in this section.

▲ You may write   on scratch paper, but you must mark your answers on the answer sheet.

▲ There is only one correct answer for each problem.

▲ If you change your mind about an answer, erase it and fill in the new one.

▲ Do not spend too much time on any one problem. Work on as many problems as you can.

▲ You may **not** use a calculator to solve the problems.

▲ Mark your answers on the section of the answer sheet that says MATH COMPUTATION.

Do you have any questions?

STOP

DO NOT TURN THE PAGE UNTIL YOU ARE TOLD TO DO SO.

1. $399 \div 19 =$

    A. 19
    B. 21
    C. 38
    D. 7,581

2. $50^2 =$

    A. 25
    B. 100
    C. 2,500
    D. 5,000

3. Simplify.

    $8 \div 2 + 3(2)$

    A. 0.8
    B. 10
    C. 14
    D. 32

4. $38.845 \div 0.85 =$

    A. 4.57
    B. 45.7
    C. 457
    D. 4,570

5. $23 \times 111 \times 246 =$

    A. 2,553
    B. 2,799
    C. 27,306
    D. 628,038

6. $5 \times \frac{1}{8} =$

    A. $\frac{1}{40}$
    B. $\frac{5}{40}$
    C. $\frac{5}{8}$
    D. 40

7. $5 + 5\frac{1}{2} =$

    A. $\frac{10}{2}$
    B. $\frac{11}{2}$
    C. $5\frac{1}{2}$
    D. $10\frac{1}{2}$

8. $14^3 =$

    A. 42
    B. 2,744
    C. 14,000
    D. 38,416

9. $\sqrt{49} =$

    A. 7
    B. 8
    C. 9
    D. 14

10. 2 is a square root of which number?

    A. 1
    B. 2
    C. 4
    D. 22

11. 10 is a square root of which number?

    A. 1
    B. 10
    C. 100
    D. 1,000

12. $8\frac{1}{9} \div \frac{5}{6} =$

    A. $6\frac{41}{54}$
    B. $7\frac{5}{18}$
    C. $8\frac{2}{15}$
    D. $9\frac{11}{15}$

Go on to the next page.

13. Simplify.

   $2(3) + 4 \div 2$

   A. 7
   B. 8
   C. 9
   D. 10

14. Simplify.

   $10 \div 2 - 4 \times 3$

   A. −7
   B. 3
   C. 7
   D. 15

15. Simplify.

   $(35y - 12) - (11y - 40)$

   A. 52y
   B. 24y + 28
   C. 24y + 52
   D. 46y + 52

16. If $6b = 56$, which inverse operation will find b?

   A. addition
   B. subtraction
   C. multiplication
   D. division

17. $\sqrt{68}$ is approximately equal to

   A. 8.25
   B. 16.50
   C. 18.25
   D. 32.00

18. The prime factors of 720 are _____.

   A. 2, 3, and 5
   B. 2, 3, and 120
   C. 5, 9, and 16
   D. 5 and 12

19. The prime factors of 24 are _____.

   A. 1 and 3
   B. 2 and 3
   C. 3 and 7
   D. 4 and 6

20. If $8(n - 5) = 27$, then $n =$

   A. $2\frac{3}{4}$
   B. 4
   C. $8\frac{3}{8}$
   D. 67

21. $0.715 \times 11 =$

   A. 7.865
   B. 10.285
   C. 11.715
   D. 78.65

22. Simplify.

   $(24 + x) + 8$

   A. $x + 8$
   B. $x + 16$
   C. $x + 24$
   D. $x + 32$

8

23. If $\frac{3n}{5} = 81$, then $n =$

   A. $16\frac{1}{5}$

   B. 27

   C. $48\frac{3}{5}$

   D. 135

24. If $3r - 9 = -15$, then $r =$

   A. −3

   B. −2

   C. 2

   D. 3

25. $\sqrt{42}$ is approximately equal to

   A. 0.42

   B. 2.80

   C. 4.20

   D. 6.48

26. $3\frac{2}{5} \times 7\frac{1}{2} =$

   A. $10\frac{9}{10}$

   B. $21\frac{1}{5}$

   C. $21\frac{9}{10}$

   D. $25\frac{1}{2}$

27. Simplify.

   $(34d + 10 - 15d) - (9d - 9 + 4)$

   A. $10d + 5$

   B. $10d + 15$

   C. $15d$

   D. $28d + 5$

28. Simplify.

   $\frac{2}{5} - \frac{3}{5}\left(\frac{10}{9} + 20\right)$

   A. −20

   B. $-13\frac{1}{9}$

   C. $-12\frac{4}{15}$

   D. $-11\frac{1}{3}$
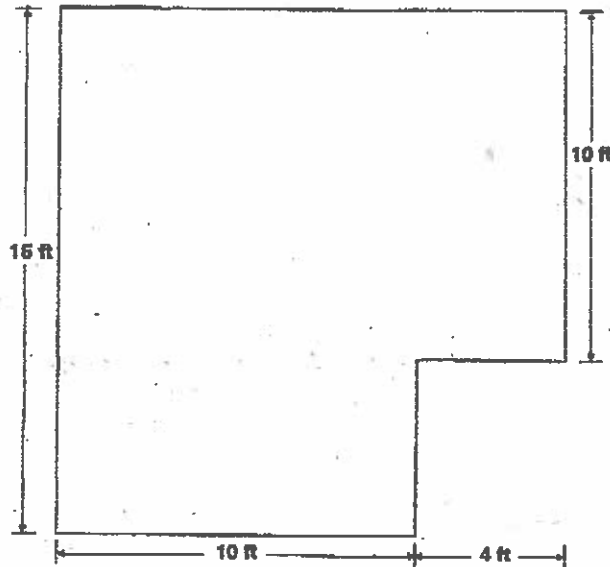
29. If $3(x + 2) + 2x = 21$, then $x =$

   A. 2

   B. $2\frac{2}{5}$

   C. 3

   D. $3\frac{4}{5}$

30. If $7(3x - 7) + 4x = 2(5x + 3) + 20$, then $x =$

   A. 1

   B. $2\frac{1}{7}$

   C. $4\frac{2}{5}$
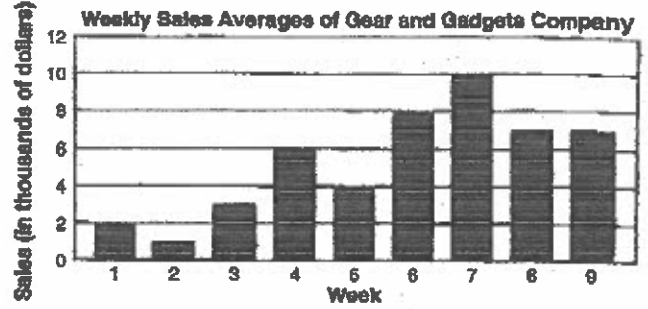
   D. 5

31. Saji wants to carpet this living room floor.

10 ft

15 ft

10 ft   4 ft

How many square feet of carpet will he need to cover the floor?

A. 40
B. 58
C. 150
D. 190

32. The graph shows the weekly sales averages for the Gear and Gadgets Company for the past nine weeks.

Weekly Sales Averages of Gear and Gadgets Company

Sales (in thousands of dollars)

Week

What is the median for these weekly averages?

A. $4,000
B. $5,000
C. $6,000
D. $7,000
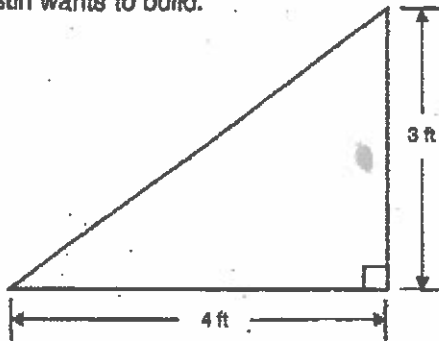
33. Kevin is rolling a cube that has numbers (1–6) printed on its sides. What is the probability that he will roll a 4?

A. $\frac{1}{6}$
B. $\frac{1}{4}$
C. $\frac{4}{6}$
D. $\frac{5}{6}$

34. This is a sketch of a skateboard ramp that Justin wants to build.

If the ramp will be 3 feet above the ground and have a 4-foot base, how long will the ramp be?

A. 3 feet
B. 5 feet
C. 8 feet
D. 10 feet

35. Jim bought salmon that cost $4.95 per half pound. If he spent $23.95, how many pounds of salmon did he buy? Round off to the nearest tenth of a pound.

A. 2.3
B. 2.4
C. 4.0
D. 4.8

36. A road map has a scale of $\frac{1}{2}$ inch for 75 miles. The distance between two cities is 600 miles. How many inches apart are they on the map?

A. 4
B. 5
C. 8
D. 37.5

STOP

IF YOU FINISH BEFORE TIME IS UP, YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

DO NOT LOOK BACK AT ANY OTHER SECTIONS IN THIS BOOKLET.

Gr. 8 (FORM B) Math Answer Keys

Part A: Math Computation

1.B	11.C	21.A	31.D
2.C	12.D	22.D	32.C
3.B	13.B	23.D	33.A
4.B	14.A	24.B	34.B
5.D	15.B	25.D	35.B
6.C	16.D	26.D	36.A
7.D	17.A	27.B	
8.B	18.A	28.C	
9.A	19.B	29.C	
10.C	20.C	30.D	

Gr.8