Placement Test for 4-8th Grades

The best placement for most students is to start in the course designed for their grade level listed below:

Standard and Accelerated Math Student Placement:

4th Grade - *Math 5/4, Third Edition*
5th Grade - *Math 6/5, Third Edition*
6th Grade - *Math 7/6, Fourth Edition*
7th Grade - See *Is my student ready for Pre-Algebra?*
8th Grade - If Pre-Algebra has been taken, see Is my student ready for Algebra 1?*

**If Pre-Algebra has not been taken, take Pre-Algebra*

Struggling/Reluctant Math Students:

5th Grade - *Math 5/4, Third Edition*
6th Grade - *Math 6/5, Third Edition*
7th Grade - *Math 7/6, Fourth Edition*
8th Grade - See *Is my student ready for Pre-Algebra?*

Instructions for Test:

1. This placement test should only be used to determine if your student is ready for a higher level than the recommended for their current grade level. For example a 4th grader wants to take 6/5. Otherwise, use the Placement information at the top of this page.
2. Print pages 1-3.
3. Allow the student to work until he/she cannot complete any more problems.
4. No calculator and no help from a parent or teacher.
5. The student should show all work on a separate piece of paper.
6. When finished, use the Answer Key at the end of this document to grade the test.
7. Use the Placement Guide below to determine placement.

Placement Guide:

- Fifteen or fewer correct from Questions 1–20: The student is not ready for Saxon 6/5. *See the placement info at the top.*
- 16+ correct from Questions 1–20: *Saxon 6/5*, 3rd Edition
- 16+ correct from Questions 1–20 and 16+ correct from Questions 21–40: *Saxon 7/6, 4th Edition*
- 16+ correct from 21–40 and 16+ correct from Questions 41–60: *Shormann Pre-Algebra*.

Show Your Work!

1. Mae-Ying bought a package of paper priced at $1.98 and 2 pens priced at $0.49 each. The tax on the entire purchase was 18¢. What was the total cost of the items?

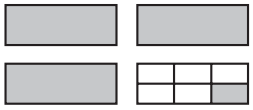
2. Seventy-five beans were equally divided into five pots. How many beans were in each pot?

3. Robo could run 7 miles in 1 hour. At that rate, how many miles could Robo run in 3 hours?

4. At 11:45 A.M. Jason glanced at the clock. His doctor's appointment was in $2\frac{1}{2}$ hours. At what time was his appointment?

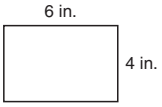
5. Find the sixth number in this counting sequence: 7, 14, 21, . . .

6. Write the number of shaded rectangles shown as a mixed number.



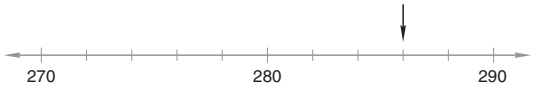
7. Twenty-five percent of this square is shaded. What percent of the square is not shaded?

8. What is the perimeter of this rectangle?



9. A square has one side that is 7 inches long. What is the area of the square?

10. To what number is the arrow pointing?



11. $4.2 + 3.5 + 0.25 + 4.0$

12.
$$\begin{array}{r} 460 \\ \times \quad 9 \\ \hline \end{array}$$

13. $6\overline{)3795}$

14. $6 \times 4 \times 10$

15.
$$\begin{array}{r} \$4.86 \\ +\ \$2.95 \\ \hline \end{array}$$

Find each missing number for 16–17:

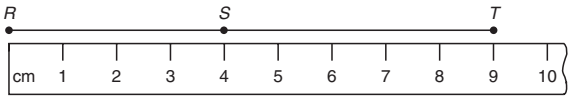
16.
$$\begin{array}{r} z \\ +\ 179 \\ \hline 496 \end{array}$$

17.
$$\begin{array}{r} 67 \\ -\ B \\ \hline 16 \end{array}$$

18. Use digits to write the number three hundred forty-three.

19. Which digit in 6.125 is in the hundredths place?

20. What is the length of $\overline{ST}$?



21. In 2 hours the 3 boys picked a total of 1347 cherries. If they share the cherries evenly, then each boy will get how many cherries?

22. After paying \$7.50 for a movie ticket, Salvador still had \$3.75. How much money did Salvador have before paying for a ticket?

23. When three new members joined the club, the number of members increased to 28. How many members were in the club before the new members arrived?

24. Adriana's age is $\frac{1}{3}$ of her dad's age. If her dad is 36 years old, how old is Adriana?

25. Estimate the sum of 672 and 830 by rounding to the nearest hundred before adding.

26. Use digits to write eight hundred eighteen thousand, eighty.

27.
$$\begin{array}{r} \$2.54 \\ 5.36 \\ +\ 0.75 \\ \hline \end{array}$$

28. $7 \times 8 \times 10$

29.
$$\begin{array}{r} 4287 \\ \times \quad 5 \\ \hline \end{array}$$

30. $3647 \div 6$

31.
$$\begin{array}{r} 41{,}026 \\ -\ 39{,}543 \\ \hline \end{array}$$

32. $30m = 6000$ Find m.

33. $\$10 - (\$5.80 + 28¢)$

34. $1\frac{3}{4} + 1\frac{3}{4}$

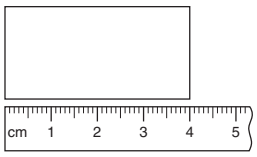
35. $\frac{7}{25} = \frac{\square}{100}$

36. Half of 100 is 50, and half of 50 is 25. What number is half of 25?

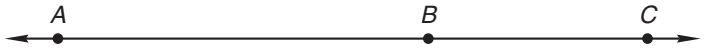
37. A stop sign is the shape of an octagon. An octagon has how many sides?

38. What are the next three terms in this counting sequence?
. . ., 2700, 2800, 2900, ____, ____, ____, . . .

39. This rectangle is half as wide as it is long. What is the perimeter of the rectangle?



40. The length of segment *AC* is 78 millimeters. If *BC* is 29 millimeters, then what is the length of segment *AB*?



41. Which digit is in the hundred-thousands place in the number 987,654,321?

42. Write the number twenty-one and five hundredths.

43. In an auditorium there are 25 rows with 18 chairs in each row. How many chairs are in the auditorium?

44. The average pumpkin weighs 6 pounds. The prize-winning pumpkin weighs 324 pounds. The prize-winning pumpkin weighs as much as how many average pumpkins?

45. What is the total price of a $45.79 item when 7% sales tax is added?

46. How many quarter-pound hamburgers can be made from 100 pounds of ground beef?

47. There were 13 original states. There are now 50 states. What fraction of the states are the original states?

48. $\frac{8}{3} \cdot \frac{3}{1}$

49. 3.7×0.25

50. $5\overline{)0.8}$

51. $2\frac{1}{2} + 1\frac{1}{6}$

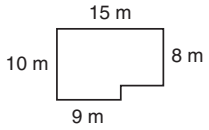
52. $\frac{3}{4} \div 1\frac{1}{2}$

53. $2^3 + \sqrt{25} \times 3 - 4^2 \div \sqrt{4}$

54. What is the average of 4.2, 2.61, and 3.6?

55. The area of a square is 64 cm^2. What is the perimeter of the square?

56. What is the area of this polygon?



57. $26.9 + 12 + w = 49.25$ Find w.

58. If $d = rt$, and if $r = 60$ and $t = 4$, what does d equal?

Complete the table for 59–60.

	Fraction	Decimal	Percent
59.	$\frac{5}{8}$	0.625	
60.		1.25	125%

Answer Key

1. $3.14

2. 15 beans

3. 21 miles

4. 2:15 P.M.

5. 42

6. $3\frac{1}{6}$

7. 75%

8. 20 in.

9. 49 sq. in.

10. 286

11. 11.95

12. 4140

13. 632 R3

14. 240

15. $7.81

16. 317

17. 51

18. 343

19. 2

20. 5 cm

21. 449 cherries

22. $11.25

23. 25 members

24. 12 years old

25. 1500

26. $818,080

27. $8.65

28. 560

29. 21,435

30. 607 R5

31. 1483

32. 200

33. $3.92

34. $3\frac{1}{2}$

35. 28

36. $12\frac{1}{2}$

37. 8 sides

38. 3000, 3100, 3200

39. 12 cm

40. 49 mm

41. 6

42. 21.05

43. 450 chairs

44. 54 average pumpkins

45. $49.00

46. 400 hamburgers

47. $\frac{13}{50}$

48. 8

49. 0.925

50. 0.16

51. $3\frac{2}{3}$

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

53. 15

54. 3.47

55. 32 cm

56. 138 m^2

57. 10.35

58. 240

59. 62.5%

60. $1\ \frac{1}{4}$