

# placement test

## FOR STUDENTS NEW TO THE SAXON PROGRAM middle grades math

### The Objective

This test can be used to help teachers find the best initial placement for students who are new to the Saxon Math program. This test includes selected content from *Math 54*, *Math 65*, *Math 76*, *Math 87* and *Algebra  $\frac{1}{2}$* . Please note that this placement test is not infallible. It is simply one indicator that teachers may use to place new students. The best placement for most new students is to start the year in the textbook designed for students at that grade level (*Math 54* for fourth grade, *Math 65* for fifth grade, *Math 76* for sixth grade, *Math 87* for seventh grade, and *Algebra  $\frac{1}{2}$*  for eighth grade). Students who have missed math concepts in their previous study may be better served beginning one textbook level lower. Caution should be exercised in placing new students outside of the title indications of these books (e.g., *Math 76* for sixth and seventh grade students). However, exceptional students at either end of the spectrum can be well served when they are placed at levels consistent with their competencies. This test is not intended for use with current Saxon students. Those students who have used the Saxon mathematics program are best placed by the recommendation of their prior teachers.

### The Rules

1. Allow the student to work until he/she cannot complete any more problems.
2. The student may not use a calculator during the test.
3. The student should work independently without coaching or other assistance.
4. The student should show all of his/her work. Look over the student's work carefully as you grade the test.
5. Use the placement guide provided along with sound judgment to help you place the student in the most appropriate book.

### The Score

- Four or fewer correct from Questions 1-10 and the student is an average-to-accelerated fourth grader: Student may begin *Math 54*.
- Five or more correct from Questions 1-10: Student may begin *Math 65*.
- Seven or more correct from Questions 1-10 and five or more correct from Questions 11-20: Student may begin *Math 76*.
- Seven or more correct from Questions 11-20 and five or more correct from Questions 21-30: Student may begin *Math 87*.
- Seven or more correct from Questions 21-30 and five or more correct from Questions 31-40: Student may begin *Algebra  $\frac{1}{2}$* .
- Seven or more correct from Questions 31-40 and five or more correct from Questions 41-50: Student may begin *Algebra I*, or be given an additional test for possible placement in a higher-level text.

For more information, or to request copies of the upper grades placement test, call:

**(800) 284-7019**

We can also be contacted at:

**2600 John Saxon Blvd.**

**Norman, OK 73071**

Or by e-mail:

**[info@saxonhomeschool.com](mailto:info@saxonhomeschool.com)**

Visit our web site:

**<http://www.saxonhomeschool.com>**

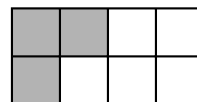
The math placement tests are only one tool used to place a student who is new to the Saxon Math program. You must also consider the student's age, previous curriculum, and how quickly the student grasps math concepts. If you need to talk with a qualified Saxon Math teacher about specific circumstances, please e-mail us at [info@saxonhomeschool.com](mailto:info@saxonhomeschool.com) or call our Parent Support Line at (580) 338-4477.

# Show Your Work!

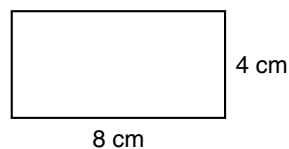
## Problems from *Math 54*

1. Roberta had six quarters, three dimes, and fourteen pennies. How much money did Roberta have?
2. At 11:45 a.m. Jason glanced at his watch. His doctor's appointment was in  $2\frac{1}{2}$  hours. At what time was the appointment?

3. What fraction of this rectangle is shaded?



4. What is the perimeter of this rectangle?



5. Three feet equals one yard. A car that is 15 feet long is how many yards long?

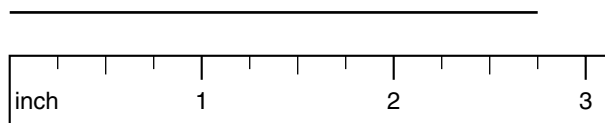
6. 
$$\begin{array}{r} 346 \\ \times 90 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} \$20.00 \\ - \$17.84 \\ \hline \end{array}$$

8. 
$$4 \overline{)1480}$$

9.  $48 + 163 + 9 + 83$

10. How long is this line segment?



## Problems from *Math 65*

11. Carlos gave the clerk a \$10 bill for a book that cost \$6.95 plus \$0.42 tax. How much money should Carlos get back from the clerk?
12. The distance around the school track is  $\frac{1}{4}$  mile. How many times around the track does Cheryl need to run in order to run one mile?
13. Estimate the product of 67 and 73 by rounding each number to the nearest ten before multiplying.

14. In two hours three boys picked a total of 1347 cherries. If they share the cherries equally, how many cherries will each boy keep?

15. 
$$\begin{array}{r} 67 \\ \times 89 \\ \hline \end{array}$$

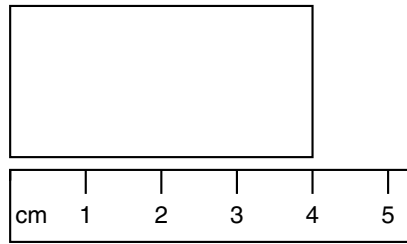
16. 
$$\begin{array}{r} 4608 \\ - 2729 \\ \hline \end{array}$$

17.  $60 \overline{)1590}$

18.  $2.25 + 12.7$

19.  $5\frac{3}{4} + 2\frac{3}{4}$

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



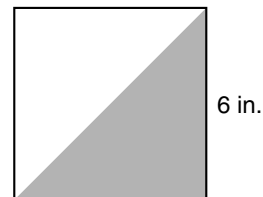
### Problems from *Math 76*

21. New York City uses about one billion, three hundred million gallons of water each day. Use digits to write that number.

22. Jill is on page 42 of a 180-page book. If she must finish the book in three days, then she needs to read an average of how many pages each day?

23. Carol cut  $2\frac{1}{2}$  inches off her hair three times last year. If she had not cut her hair, how much longer would it have been at the end of the year?

24. One half of the area of the square is shaded. What is the area of the shaded region?



25.  $2\frac{1}{3} + 1\frac{3}{4}$

26.  $6.3 \times 0.48$

27.  $6.7 + 0.48$

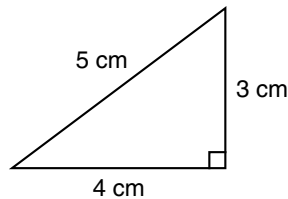
28.  $\frac{5}{8} \times \frac{3}{5}$

29.  $6.3 \div 9$

30. If  $n - 72 = 36$ , what is the value of  $n$ ?

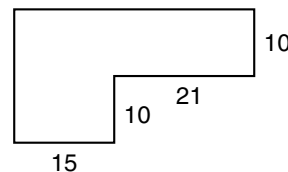
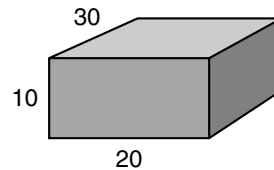
## Problems from *Math 87*

31. Round 27,647 to the nearest thousand.
32. Forty percent of the thirty students in the class are boys. How many girls are in the class?
33. Evaluate  $ab - c$  if  $a = 5$ ,  $b = 3$ , and  $c = 4$ .
34. Albert bought three blank tapes for \$5.95. Find the cost per tape to the nearest cent.
35.  $4.6 - 3.97$
36.  $2.5 \div 100$
37.  $2\frac{1}{2} \times 1\frac{2}{3}$
38.  $\frac{3}{4} \div \frac{2}{3}$
39.  $10 - w = 1.5$  Find  $w$ .
40. What is the area of this triangle?



## Problems from *Algebra $\frac{1}{2}$*

41. What fraction of 56 is 21?
42. What number is  $\frac{4}{7}$  of 210?
43. Evaluate  $xy - yt$  if  $x = 12$ ,  $y = \frac{1}{3}$ , and  $t = 6$ .
44. Find the volume of this rectangular solid. Dimensions are in feet.
45. Find the area of this figure. Dimensions are in centimeters.



46.  $(-5)(-3) + (-6)$
47.  $18.4 \times 0.013$
48.  $\frac{7}{8} + 1\frac{3}{16} - \frac{1}{2}$
49.  $5x - 2 = 88$  Find  $x$ .
50.  $(6)(3) + 4(2 + 12)$

***Saxon Publishers***  
***Middle Grades Placement Test Guide***

Name \_\_\_\_\_

Date Tested \_\_\_\_\_

**Directions:** For each correct answer, place a check mark in the corresponding box. For each section, count the number of correct answers. Place the student according to the placement information for that section.

Score Card	Number of Correct Answers	Placement
1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/>	_____	<b>Four or fewer correct from 1—10:</b> 1. Average-to-accelerated fourth grader: Begin <i>Math 54</i> . 2. Below average fourth grader: Consider <i>Math 3</i> . <b>Five or more correct from 1—10:</b> Begin <i>Math 65</i> .
11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> 14. <input type="checkbox"/> 15. <input type="checkbox"/> 16. <input type="checkbox"/> 17. <input type="checkbox"/> 18. <input type="checkbox"/> 19. <input type="checkbox"/> 20. <input type="checkbox"/>	_____	<b>Seven or more correct from 1—10 and            five or more correct from 11—20:</b> Begin <i>Math 76</i> .
21. <input type="checkbox"/> 22. <input type="checkbox"/> 23. <input type="checkbox"/> 24. <input type="checkbox"/> 25. <input type="checkbox"/> 26. <input type="checkbox"/> 27. <input type="checkbox"/> 28. <input type="checkbox"/> 29. <input type="checkbox"/> 30. <input type="checkbox"/>	_____	<b>Seven or more correct from 11—20 and            five or more correct from 21—30:</b> Begin <i>Math 87</i> .
31. <input type="checkbox"/> 32. <input type="checkbox"/> 33. <input type="checkbox"/> 34. <input type="checkbox"/> 35. <input type="checkbox"/> 36. <input type="checkbox"/> 37. <input type="checkbox"/> 38. <input type="checkbox"/> 39. <input type="checkbox"/> 40. <input type="checkbox"/>	_____	<b>Seven or more correct from 21—30 and            five or more correct from 31—40:</b> Begin <i>Algebra <math>\frac{1}{2}</math></i> .
41. <input type="checkbox"/> 42. <input type="checkbox"/> 43. <input type="checkbox"/> 44. <input type="checkbox"/> 45. <input type="checkbox"/> 46. <input type="checkbox"/> 47. <input type="checkbox"/> 48. <input type="checkbox"/> 49. <input type="checkbox"/> 50. <input type="checkbox"/>	_____	<b>Seven or more correct from 31—40 and            five or more correct from 41—50:</b> Student may begin <i>Algebra 1</i> or can be given an additional test for possibility of beginning a higher-level text.

*Answers for  
Saxon Publishers  
Middle Grades Placement Test*

- |  |                          |
|--|--------------------------|
| 1. \$1.94                              | 26. 3.024                |
| 2. 2:15 p.m.                           | 27. 7.18                 |
| 3. $\frac{3}{8}$                       | 28. $\frac{3}{8}$        |
| 4. 24 cm                               | 29. 0.7                  |
| 5. 5 yards                             | 30. 108                  |
| 6. 31,140                              | 31. 28,000               |
| 7. \$2.16                              | 32. 18 girls             |
| 8. 370                                 | 33. 11                   |
| 9. 303                                 | 34. \$1.98               |
| 10. $2\frac{3}{4}$ in.                 | 35. 0.63                 |
| 11. \$2.63                             | 36. 0.025                |
| 12. 4 times                            | 37. $4\frac{1}{6}$       |
| 13. 4900                               | 38. $1\frac{1}{8}$       |
| 14. 449 cherries                       | 39. 8.5                  |
| 15. 5963                               | 40. 6 cm <sup>2</sup>    |
| 16. 1879                               | 41. $\frac{3}{8}$        |
| 17. 26 r 30 or $26\frac{1}{2}$ or 26.5 | 42. 120                  |
| 18. 14.95                              | 43. 2                    |
| 19. $8\frac{1}{2}$                     | 44. 6000 ft <sup>3</sup> |
| 20. 12 cm                              | 45. 510 cm <sup>2</sup>  |
| 21. 1,300,000,000                      | 46. 9                    |
| 22. 46 pages                           | 47. 0.2392               |
| 23. $7\frac{1}{2}$ in.                 | 48. $1\frac{9}{16}$      |
| 24. 18 sq. in. or 18 in. <sup>2</sup>  | 49. 18                   |
| 25. $4\frac{1}{12}$                    | 50. 74                   |



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2600 John Saxon Blvd / Norman, OK 73071  
www.saxonhomeschool.com (800) 284-7019