

# intermediate 3–5 program ©2012

**Saxon Math Intermediate 3–5** is a textbook-based comprehensive series that incorporates instructional materials, activities, and technology to support mastery of the Common Core State Standards.

**Saxon Math** Intermediate 3–5 offers complete components and materials for students and teachers.

- Teacher’s Manual with math conversations to promote dialogue, inclusion and EL support, extensions for advanced learners, and more
- Teacher and student technology components
- Additional resources for differentiating instruction
- Instructional posters
- Manipulative kits

## Intermediate 3–5 Teacher’s Manuals



Saxon Math Intermediate 3



Saxon Math Intermediate 4



Saxon Math Intermediate 5

Saxon Math encourages students to explain their reasoning and justify their answers, which supports the Standards for Mathematical Practice.

**Lesson Practice** Estimate First estimate the exact answer.  
 a.  $58 \times 23$  b.  $48 \times 1200$   $1234$   $250$

**Written Practice** Distributed and independent practice

1. Ninety-one students are divided as equally as possible among 3 classrooms.  
 a. How many classrooms have exactly 30 students? 2 classrooms  
 b. How many classrooms have 31 students? 1 classroom

2. Analyze In 1970 it cost 6¢ to mail a letter. How much did it cost to mail twenty letters in 1970? \$1.20  
 b. How much does it cost to mail twenty letters today? Answers will vary with current first-class rates.

3. Reason Point A represents what number on this number line? 120 140 160 180

4. George Washington was born in 1732. How old was he when he became the first president of the United States in 1789? 57 years

5. A \$1 bill weighs about 1 gram. How much would a \$5 bill weigh? about 5 grams

6. Draw a quadrilateral that has two pairs of parallel sides.  
 Samples:

7. Name the shaded part of the large square.  
 a. as a fraction,  $\frac{1}{4}$   
 b. as a decimal number, 0.25

8. Estimate Jon used rounding and decided that \$4,000 was a good estimate of the product  $58 \times 67$ . Was Jon's estimate reasonable? Explain why or why not. No, sample: the product of the factors after being rounded to the nearest ten is  $5000 \times 90 = \$400$ .

**Inclusion**

Use this strategy if a student displays:

- a slow learning rate.
- difficulty with abstract processing.

**Estimating Multiplication and Division Answers** (pairs)

**Materials:** money manipulatives

Read the following word problem to students:  
 Thomas wanted to buy apples at the grocery store. Each apple was 33¢. Estimate the cost of 4 apples.

Tell students to write the multiplication problem on their paper.

**"To estimate, we first round 33¢ to the nearest ten cents. What number is that?" 30¢**

- Have students use their money manipulatives to make 4 groups of \$0.30.

**"About how much money will Thomas owe?" \$1.20**

- Write the following word problem on the board or overhead, and have students work in pairs to solve.  
 Vonda multiplied 11 and 19. She got 209 as the product. Is Vonda's answer reasonable?
- Have students use estimation to determine if Vonda's answer is reasonable.  
 yes; sample:  $10 \times 20 = 200$

**Concept (Continued)**

**Practice** Problems as guided practice to students' understanding of today's concept.

**Problems a–d (Estimate)**  
 The rounded numbers that were used to produce the estimates are shown below:  
 Problem a:  $60 \times 20$   
 Problem b:  $50 \times 50$   
 Problem c:  $60 \times 40$   
 Problem d:  $1800 \div 9$

**Problem d Error Alert**  
 Students may choose to round 1845 to 1850. If they do this, they will get an answer with a remainder because 9 does not divide evenly into 1850.

**Closure** The questions below help assess the concepts taught in this lesson.

**"Why is it important to make an estimate of what an exact answer will be?"**  
 Sample: The estimate is used to decide if the exact answer is reasonable.

**"What should we do if we find that an estimate is very different from an exact answer?"** Sample: Look for an error in the computation that produced the exact answer or complete the computation a second time.

**"Explain how to make a reasonable estimate of the product of  $18 \times 71$ ."**  
 Sample: Round 18 to 20 and round 71 to 70; a reasonable estimate is  $20 \times 70$ , or 1400.

**Written Practice**

**Math Conversations**  
 Independent Practice and Discussions to Increase Understanding

**Problem 1**  
 Make sure students recognize that the meaning of the phrase "as equally as possible" is different from the meaning of the word equally. In this problem, 91 is not divisible by 3, so it is not possible for the same number of students to be in each classroom.

(continued)

Lesson 93 593

For parallel support for special populations and Rtl see page 380.

# intermediate 3–5

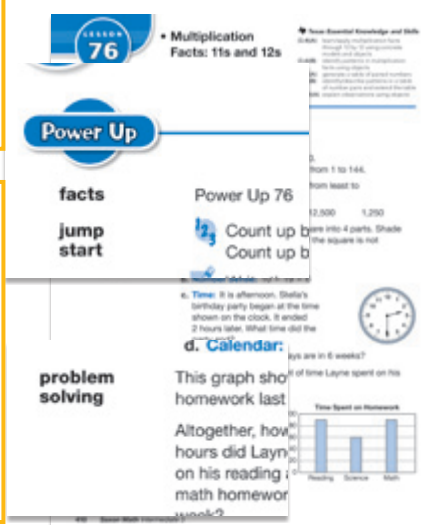
## Intermediate 3 and 4 has full teacher, student, and technology support for mastery of grade-level concepts.

Using a textbook format, the program offers daily cumulative, mixed practice, and frequent assessment to continuously monitor student progress. Purposeful activities are embedded within lessons to help students make the transition from the concrete to the abstract.

From Intermediate 3 Student Edition, Lesson 76

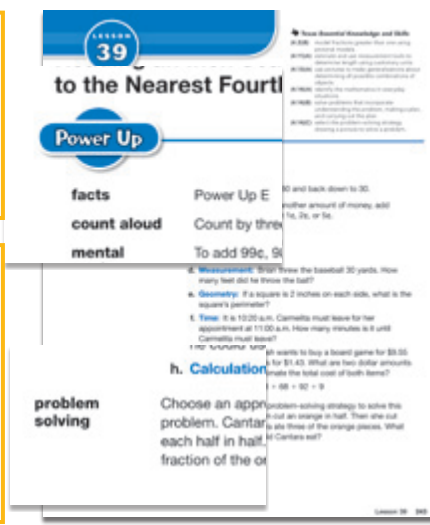
From Intermediate 4 Student Edition, Lesson 39

Each lesson begins with a Power Up to practice and reinforce foundational concepts.



Problem-solving practice happens every day—a guide is included for the teacher to promote communication of process and strategies. This correlates to the Common Core Standards for Mathematical Practice.

Each lesson begins with a Power Up so students reach a level of automatic recall with facts and mental math strategies.



Daily problem-solving practice encourages students to use a variety of strategies—a guide is included for the teacher to promote open-ended and thinking questions.

MATHEMATICS  
grades 3–5

## Intermediate 5 has full teacher, student, and technology support to prepare for middle school math.

**Saxon Math** Intermediate 5 is a comprehensive 5th grade math curriculum that uses a textbook format. The program offers daily cumulative, mixed practice, and frequent assessment to continuously monitor student progress. Multi-step performance tasks with evaluation rubrics are also included as students tackle more advanced and abstract concepts.

Each day's Power Up gives students the opportunity to build number sense with mental math exercises.

Fact practice in the Intermediate 5 program goes beyond traditional texts by mastering fractions and mixed numbers—key concepts for success in algebra and beyond.

Daily real-world problem-solving practice encourages students to use a variety of strategies—a guide is included for the teacher to promote critical-thinking questions and math dialogue.

