## Standards-Based Progress Mathematics

Aligned to the Chapter 111.

# Texas Essential Knowledge and Skills (TEKS) for Mathematics 

Subchapter A. Elementary, §111.5, Grade 3, Adopted 2012.

## Grade 3

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## (b) Knowledge and skills

## Grade 3 Texas Essential Knowledge and Skills for Mathematics

(2) Number and operations. The student applies mathematical process standards to represent and compare whole numbers and understand relationships related to place value. The student is expected to:
\(\left.\begin{array}{ll}(A) \& compose and decompose numbers up to <br>
100,000 as a sum of so many ten thousands, so <br>
many thousands, so many hundreds, so many <br>
tens, and so many ones using objects, pictorial <br>
models, and numbers, including expanded <br>

notation as appropriate;\end{array}\right]\)| describe the mathematical relationships found |
| :--- |
| (B) the base-10 place value system through the |
| hundred thousands place; |

(D) compare and order whole numbers up to 100,000 and represent comparisons using the symbols $>,<$, or $=$.
(3) Number and operations. The student applies mathematical process standards to represent and explain fractional units. The student is expected to:

> (A) represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6 , and 8 using concrete objects and pictorial models, including strip diagrams and number lines;

## Sadlier Standards-Based Progress Mathematics Grade 3

n/a

| Lesson $13 \quad$Round Whole Numbers to the Nearest 10 or <br>  <br> 100-pp. 112-119 <br> - Understand: Rounding two-digit numbers to <br> the nearest 10 |  |
| :--- | :--- |
|  | Understand: Rounding three-digit numbers to <br> the nearest 100 |
| $\mathrm{n} / \mathrm{a}$ |  |

Lesson 16 Understand Unit Fractions as Quantities-pp. 142-149

- Understand: The meaning of a unit fraction
- Understand: The numerator in a unit fraction
- Understand: The denominator in a unit fraction

Lesson 17 Understand Fractions as Quantities-pp. 150157

- Understand: Using unit fractions to form other fractions

Lesson 18 Understand Fractions on the Number Line-pp. 158-165

- Understand: Representing a unit fraction on a number line
- Understand: Representing a fraction on a number line

Lesson 19 Understand Equivalent Fractions-pp. 166-173

- Understand: Equivalent fractions on a number line

Grade 3 Texas Essential Knowledge and Skills for Mathematics
(B) determine the corresponding fraction greater than zero and less than or equal to one with denominators of $2,3,4,6$, and 8 given a specified point on a number line;
(C) explain that the unit fraction $1 / b$ represents the quantity formed by one part of a whole that has been partitioned into $b$ equal parts where $b$ is a non-zero whole number;

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Lesson 20 Write Equivalent Fractions-pp. 174-181

- Understand: Using fraction strips to find equivalent fractions
- Understand: Using number lines to find equivalent fractions

Lesson 21 Relate Whole Numbers and Fractions-pp. 182189

- Understand: Recognizing fractions equivalent to whole numbers
- Understand: Expressing a whole number as a fraction

Lesson 22 Compare Fractions: Same Denominator-pp.
190-197

- Understand: Comparing fractions on a number line
- Understand: Using fraction strips to compare fractions with the same denominator

Lesson 23 Compare Fractions: Same Numerator-pp. 198205

- Understand: Using number lines and models to compare fractions with the same numerator
- Understand: Using number strips to compare fractions with the same numerator

Lesson 19 Understand Equivalent Fractions-pp. 166-173

- Understand: Equivalent fractions on a number line

Lesson 20 Write Equivalent Fractions-pp. 174-181

- Understand: Using fraction strips to find equivalent fractions
- Understand: Using number lines to find equivalent fractions

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- Understand: Comparing fractions on a number line
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- Understand: The meaning of a unit fraction
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- Understand: The denominator in a unit fraction

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(D) compose and decompose a fraction $a / b$ with a numerator greater than zero and less than or equal to $b$ as a sum of parts $1 / b$;

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Lesson 17 Understand Fractions as Quantities-pp. 150157

- Understand: Using unit fractions to form other fractions

Lesson 36 Partition Shapes to Make Equal Areas-pp. 320327

- Understand: Partitioning a circle into 4 parts with equal area
- Understand: Partitioning a rectangle into 8 parts with equal area

Lesson 16 Understand Unit Fractions as Quantities-pp. 142-149

- Understand: The meaning of a unit fraction
- Understand: The numerator in a unit fraction
- Understand: The denominator in a unit fraction

Lesson 17 Understand Fractions as Quantities-pp. 150157

- Understand: Using unit fractions to form other fractions

Lesson 19 Understand Equivalent Fractions-pp. 166-173

- Understand: Equivalent fractions on a number line

Lesson 20 Write Equivalent Fractions-pp. 174-181

- Understand: Using fraction strips to find equivalent fractions
- Understand: Using number lines to find equivalent fractions

Lesson 22 Compare Fractions: Same Denominator-pp. 190-197

- Understand: Comparing fractions on a number line
- Understand: Using fraction strips to compare fractions with the same denominator

| Lesson 23 | Compare Fractions: Same Numerator-pp. 198205 <br> - Understand: Using number lines and models to compare fractions with the same numerator <br> - Understand: Using number strips to compare fractions with the same numerator |
| :---: | :---: |
| Lesson 36 | Partition Shapes to Make Equal Areas-pp. 320327 <br> - Understand: Partitioning a circle into 4 parts with equal area <br> - Understand: Partitioning a rectangle into 8 parts with equal area |

Grade 3 Texas Essential Knowledge and Skills for Mathematics
(E) solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of $2,3,4,6$, and 8 ;
(F) represent equivalent fractions with denominators of $2,3,4,6$, and 8 using a variety of objects and pictorial models, including number lines;

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 18 Understand Fractions on the Number Line-pp. 158-165

- Understand: Representing a unit fraction on a number line
- Understand: Representing a fraction on a number line

Lesson 19 Understand Equivalent Fractions-pp. 166-173

- Understand: Equivalent fractions on a number line

Lesson 20 Write Equivalent Fractions-pp. 174-181

- Understand: Using fraction strips to find equivalent fractions
- Understand: Using number lines to find equivalent fractions

Lesson 22 Compare Fractions: Same Denominator-pp. 190-197

- Understand: Comparing fractions on a number line
- Understand: Using fraction strips to compare fractions with the same denominator

Lesson 23 Compare Fractions: Same Numerator-pp. 198205

- Understand: Using number lines and models to compare fractions with the same numerator
- Understand: Using number strips to compare fractions with the same numerator

Lesson 19 Understand Equivalent Fractions-pp. 166-173

- Understand: Equivalent fractions on a number line

Lesson 20 Write Equivalent Fractions-pp. 174-181

- Understand: Using fraction strips to find equivalent fractions
- Understand: Using number lines to find equivalent fractions

Lesson 21 Relate Whole Numbers and Fractions-pp. 182189

- Understand: Recognizing fractions equivalent to whole numbers
- Understand: Expressing a whole number as a fraction

Lesson 22 Compare Fractions: Same Denominator-pp.
190-197

- Understand: Comparing fractions on a number line
- Understand: Using fraction strips to compare fractions with the same denominator

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Grade 3 Texas Essential Knowledge and Skills for Mathematics
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(G) explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model; and
(H) compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models.

## Sadlier Standards-Based Progress Mathematics Grade 3

Lesson 23 Compare Fractions: Same Numerator-pp. 198205

- Understand: Using number lines and models to compare fractions with the same numerator
- Understand: Using number strips to compare fractions with the same numerator

Lesson 19 Understand Equivalent Fractions-pp. 166-173

- Understand: Equivalent fractions on a number line

Lesson 20 Write Equivalent Fractions-pp. 174-181

- Understand: Using fraction strips to find equivalent fractions
- Understand: Using number lines to find equivalent fractions

Lesson 21 Relate Whole Numbers and Fractions-pp. 182189

- Understand: Recognizing fractions equivalent to whole numbers
- Understand: Expressing a whole number as a fraction

Lesson 22 Compare Fractions: Same Denominator-pp. 190-197

- Understand: Comparing fractions on a number line
- Understand: Using fraction strips to compare fractions with the same denominator

Lesson 23 Compare Fractions: Same Numerator-pp. 198205

- Understand: Using number lines and models to compare fractions with the same numerator
- Understand: Using number strips to compare fractions with the same numerator

Lesson 16 Understand Unit Fractions as Quantities-pp. 142-149

- Understand: The meaning of a unit fraction
- Understand: The numerator in a unit fraction
- Understand: The denominator in a unit fraction

Lesson 17 Understand Fractions as Quantities-pp. 150157

- Understand: Using unit fractions to form other fractions

Lesson 18 Understand Fractions on the Number Line-pp. 158-165

- Understand: Representing a unit fraction on a number line
- Understand: Representing a fraction on a number line

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Grade 3 Texas Essential Knowledge and Skills for Mathematics
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(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:
(A) solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction;
(B) round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems;

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 22 Compare Fractions: Same Denominator-pp. 190-197

- Understand: Comparing fractions on a number line
- Understand: Using fraction strips to compare fractions with the same denominator

Lesson 23 Compare Fractions: Same Numerator-pp. 198205

- Understand: Using number lines and models to compare fractions with the same numerator
- Understand: Using number strips to compare fractions with the same numerator


Lesson 10 Problem Solving: Two-Step Problems—pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 11 Problem Solving: Use Equations-pp. 96-103

- Understand: Writing an equation for a twostep word problem
- Understand: Using diagrams in solving twostep word problems

Lesson 13 Round Whole Numbers to the Nearest 10 or 100-pp. 112-119

- Understand: Rounding two-digit numbers to the nearest 10
- Understand: Rounding three-digit numbers to the nearest 100

Lesson 14 Add and Subtract Fluently within 1000-pp. 120127

- Understand: Using place-value methods to add and subtract
- Understand: Using properties of addition to find sums
- Understand: Adding on to subtract

Lesson 13 Round Whole Numbers to the Nearest 10 or 100—pp. 112-119

- Understand: Rounding two-digit numbers to the nearest 10
- Understand: Rounding three-digit numbers to the nearest 100

Estimation-pp. 88-89, 95-96, 98, 112-114, 118-119, 138, 213, 215-216, 226-230, 250, 353

## Grade 3 Texas Essential Knowledge and Skills for Mathematics

(C) determine the value of a collection of coins and bills;
(D) determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10;
(E)
(E) represent multiplication facts by using a variety of approaches such as repeated addition, equalsized groups, arrays, area models, equal jumps on a number line, and skip counting;

Sadlier Standards-Based Progress Mathematics Grade 3

|  | n/a |
| :---: | :---: |
| Lesson 1 | Interpret Products of Whole Numbers-pp. 1017 <br> - Understand: What multiplication means <br> - Understand: What a product means |
| Lesson 3 | Problem Solving: Multiplication/Division and <br> Equal Groups-pp. 26-33 <br> - Understand: Using multiplication to solve problems involving equal groups <br> - Understand: Using division to find the number of equal groups <br> - Understand: Using division to find the number in each group |
| Lesson 4 | Problem Solving: Multiplication/Division and Arrays-pp. 34-41 <br> - Understand: Using arrays to solve problems <br> - Understand: Representing problem situations with arrays |
| Lesson 32 | Problem Solving: Measurement—pp. 288-295 <br> - Understand: Using a drawing to help solve a problem |
| Lesson 1 | Interpret Products of Whole Numbers-pp. 1017 <br> - Understand: What multiplication means <br> - Understand: What a product means |
| Lesson 3 | Problem Solving: Multiplication/Division and Equal Groups-pp. 26-33 <br> - Understand: Using multiplication to solve problems involving equal groups <br> - Understand: Using division to find the number of equal groups <br> - Understand: Using division to find the number in each group |
| Lesson 4 | Problem Solving: Multiplication/Division and Arrays-pp. 34-41 <br> - Understand: Using arrays to solve problems <br> - Understand: Representing problem situations with arrays |
| Lesson 5 | Find Unknown Numbers in Multiplication and Division Equations-pp. 42-49 <br> - Understand: Finding unknown numbers in multiplication equations <br> - Understand: Finding unknown numbers in division equations |

Grade 3 Texas Essential Knowledge and Skills for Mathematics

| (F) $\begin{array}{l}\text { recall facts to multiply up to } 10 \text { by } 10 \text { with } \\ \text { automaticity and recall the corresponding }\end{array}$ |
| :--- | division facts;

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 6 Apply Commutative and Associative Properties to Multiply-pp. 50-57

- Understand: Two numbers can be multiplied in any order
- Understand: Three factors can be grouped in different ways

Lesson 7 Apply the Distributive Property to Multiply—pp. 58-65

- Understand: Breaking apart numbers to multiply
- Understand: Using parentheses with the Distributive Property


## Lesson 8 Divide by Finding an Unknown Factor-pp. 66-

73

- Understand: Understand: Multiplication and division fact families
- Understand: Using a fact family to find an unknown factor

Lesson 10 Problem Solving: Two-Step Problems-pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 11 Problem Solving: Use Equations-pp. 96-103

- Understand: Writing an equation for a twostep word problem
- Understand: Using diagrams in solving twostep word problems

Lesson 12 Identify and Explain Arithmetic Patterns-pp. 104-111

- Understand: Patterns in the multiplication table
- Understand: Patterns in the addition table
- Understand: Rules for patterns

Lesson 32 Problem Solving: Measurement-pp. 288-295

- Understand: Using a drawing to help solve a problem

Lesson 1 Interpret Products of Whole Numbers-pp. 1017

- Understand: What multiplication means
- Understand: What a product means

Lesson 2 Interpret Quotients of Whole Numbers-pp. 1825

- Understand: Using division to find how many in an equal share
- Understand: Using division to separate

Lesson 3 Problem Solving: Multiplication/Division and Equal Groups-pp. 26-33

- Understand: Using multiplication to solve problems involving equal groups
- Understand: Using division to find the number of equal groups
- Understand: Using division to find the number in each group

Lesson 4 Problem Solving: Multiplication/Division and
Arrays-pp. 34-41

- Understand: Using arrays to solve problems
- Understand: Representing problem situations with arrays

Lesson 5 Find Unknown Numbers in Multiplication and Division Equations-pp. 42-49

- Understand: Finding unknown numbers in multiplication equations
- Understand: Finding unknown numbers in division equations

Lesson 6 Apply Commutative and Associative Properties to Multiply—pp. 50-57

- Understand: Two numbers can be multiplied in any order
- Understand: Three factors can be grouped in different ways

Lesson 7 Apply the Distributive Property to Multiply—pp. 58-65

- Understand: Breaking apart numbers to multiply
- Understand: Using parentheses with the Distributive Property

Lesson 8 Divide by Finding an Unknown Factor-pp. 6673

- Understand: Understand: Multiplication and division fact families
- Understand: Using a fact family to find an unknown factor

Lesson 9 Multiply and Divide Fluently within 100-pp. 80-
87

- Understand: How multiplication and division are related
- Understand: How to use properties of multiplication to learn facts

Lesson 10 Problem Solving: Two-Step Problems—pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 11 Problem Solving: Use Equations-pp. 96-103

- Understand: Writing an equation for a twostep word problem
- Understand: Using diagrams in solving twostep word problems

Grade 3 Texas Essential Knowledge and Skills for Mathematics
(G) use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties;
(H) determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally;

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 12 Identify and Explain Arithmetic Patterns-pp. 104-111

- Understand: Patterns in the multiplication table
- Understand: Patterns in the addition table
- Understand: Rules for patterns

Lesson 32 Problem Solving: Measurement-pp. 288-295

- Understand: Using a drawing to help solve a problem

Lesson 5 Find Unknown Numbers in Multiplication and Division Equations-pp. 42-49

- Understand: Finding unknown numbers in multiplication equations
- Understand: Finding unknown numbers in division equations

Lesson 12 Identify and Explain Arithmetic Patterns-pp. 104-111

- Understand: Patterns in the multiplication table
- Understand: Patterns in the addition table
- Understand: Rules for patterns

Lesson 15 Multiply One-Digit Whole Numbers by Multiples of 10-pp. 128-135

- Understand: What a multiple of 10 is
- Understand: Multiplying by a multiple of 10

Lesson 1 Interpret Products of Whole Numbers-pp. 1017

- Understand: What multiplication means
- Understand: What a product means

Lesson 2 Interpret Quotients of Whole Numbers-pp. 1825

- Understand: Using division to find how many in an equal share
- Understand: Using division to separate

Lesson 3 Problem Solving: Multiplication/Division and Equal Groups-pp. 26-33

- Understand: Using multiplication to solve problems involving equal groups
- Understand: Using division to find the number of equal groups
- Understand: Using division to find the number in each group

Lesson 4 Problem Solving: Multiplication/Division and
Arrays-pp. 34-41

- Understand: Using arrays to solve problems
- Understand: Representing problem situations with arrays

Grade 3 Texas Essential Knowledge and Skills for Mathematics
(I) determine if a number is even or odd using

Sadlier Standards-Based Progress Mathematics Grade 3

| Lesson 6 | Apply Commutative and Associative Properties to Multiply—pp. 50-57 <br> - Understand: Two numbers can be multiplied in any order <br> - Understand: Three factors can be grouped in different ways |
| :---: | :---: |
| Lesson 7 | Apply the Distributive Property to Multiply—pp. 58-65 <br> - Understand: Breaking apart numbers to multiply <br> - Understand: Using parentheses with the Distributive Property |
| Lesson 8 | Divide by Finding an Unknown Factor-pp. 6673 <br> - Understand: Understand: Multiplication and division fact families <br> - Understand: Using a fact family to find an unknown factor |
| Lesson 9 | Multiply and Divide Fluently within 100-pp. 8087 <br> - Understand: How multiplication and division are related <br> - Understand: How to use properties of multiplication to learn facts |

Lesson 10 Problem Solving: Two-Step Problems-pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 12 Identify and Explain Arithmetic Patterns—pp. 104-111

- Understand: Patterns in the multiplication table
- Understand: Patterns in the addition table
- Understand: Rules for patterns

Lesson 32 Problem Solving: Measurement-pp. 288-295

- Understand: Using a drawing to help solve a problem

Lesson 2 Interpret Quotients of Whole Numbers-pp. 18-
25

- Understand: Using division to find how many in an equal share
- Understand: Using division to separate


## Lesson 6 Apply Commutative and Associative Properties

 to Multiply-pp. 50-57- Understand: Two numbers can be multiplied in any order
- Understand: Three factors can be grouped in different ways

Grade 3 Texas Essential Knowledge and Skills for Mathematics
(J) determine a quotient using the relationship between multiplication and division; and

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 7 Apply the Distributive Property to Multiply—pp. 58-65

- Understand: Breaking apart numbers to multiply
- Understand: Using parentheses with the Distributive Property
Lesson 9 Multiply and Divide Fluently within 100-pp. 8087
- Understand: How multiplication and division are related
- Understand: How to use properties of multiplication to learn facts

Lesson 12 Identify and Explain Arithmetic Patterns-pp. 104-111

- Understand: Patterns in the multiplication table
- Understand: Patterns in the addition table
- Understand: Rules for patterns

Lesson 2 Interpret Quotients of Whole Numbers-pp. 1825

- Understand: Using division to find how many in an equal share
- Understand: Using division to separate

Lesson 6 Apply Commutative and Associative Properties to Multiply—pp. 50-57

- Understand: Two numbers can be multiplied in any order
- Understand: Three factors can be grouped in different ways

Lesson 7 Apply the Distributive Property to Multiply—pp. 58-65

- Understand: Breaking apart numbers to multiply
- Understand: Using parentheses with the Distributive Property

Lesson 8 Divide by Finding an Unknown Factor-pp. 6673

- Understand: Understand: Multiplication and division fact families
- Understand: Using a fact family to find an unknown factor

Lesson 9 Multiply and Divide Fluently within 100-pp. 8087

- Understand: How multiplication and division are related
- Understand: How to use properties of multiplication to learn facts

Lesson 12 Identify and Explain Arithmetic Patterns—pp. 104-111

- Understand: Patterns in the multiplication table

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Grade 3 Texas Essential Knowledge and Skills for Mathematics
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(K) solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts.
5) Algebraic reasoning. The student applies mathematical process standards to analyze and create patterns and relationships. The student is expected to:
(A) represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations;
(B) represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations;

## Sadlier Standards-Based Progress Mathematics Grade 3

- Understand: Patterns in the addition table
- Understand: Rules for patterns

Lesson 3 Problem Solving: Multiplication/Division and Equal Groups-pp. 26-33

- Understand: Using multiplication to solve problems involving equal groups
- Understand: Using division to find the number of equal groups
- Understand: Using division to find the number in each group

Lesson 4 Problem Solving: Multiplication/Division and Arrays-pp. 34-41

- Understand: Using arrays to solve problems
- Understand: Representing problem situations with arrays

Lesson 10 Problem Solving: Two-Step Problems-pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 11 Problem Solving: Use Equations-pp. 96-103

- Understand: Writing an equation for a twostep word problem
- Understand: Using diagrams in solving twostep word problems

Lesson 32 Problem Solving: Measurement—pp. 288-295

- Understand: Using a drawing to help solve a problem

Lesson 14 Add and Subtract Fluently within 1000-pp. 120127

- Understand: Using place-value methods to add and subtract
- Understand: Using properties of addition to find sums
- Understand: Adding on to subtract

Lesson 1 Interpret Products of Whole Numbers-pp. 1017

- Understand: What multiplication means
- Understand: What a product means

Lesson 2 Interpret Quotients of Whole Numbers-pp. 1825

- Understand: Using division to find how many in an equal share
- Understand: Using division to separate

Grade 3 Texas Essential Knowledge and Skills for Mathematics
describe a multiplication expression as a
comparison such as $3 \times 24$ represents 3 times as
much as 24 ;
(D) determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product; and

Sadlier Standards-Based Progress Mathematics Grade 3

| Lesson 3 | Problem Solving: Multiplication/Division and <br> Equal Groups-pp. $26-33$ |
| :--- | :--- |
|  | • Understand: Using multiplication to solve |
|  | problems involving equal groups |
|  | Understand: Using division to find the number <br> of equal groups |
|  | Understand: Using division to find the number |
| in each group |  |

Lesson 10 Problem Solving: Two-Step Problems-pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 11 Problem Solving: Use Equations-pp. 96-103

- Understand: Writing an equation for a twostep word problem
- Understand: Using diagrams in solving twostep word problems

Lesson 32 Problem Solving: Measurement—pp. 288-295

- Understand: Using a drawing to help solve a problem

Lesson 1 Interpret Products of Whole Numbers-pp. 1017

- Understand: What multiplication means
- Understand: What a product means

Lesson 6 Apply Commutative and Associative Properties to Multiply-pp. 50-57

- Understand: Two numbers can be multiplied in any order
- Understand: Three factors can be grouped in different ways

Lesson 7 Apply the Distributive Property to Multiply—pp. 58-65

- Understand: Breaking apart numbers to multiply
- Understand: Using parentheses with the Distributive Property

Lesson 3 Problem Solving: Multiplication/Division and Equal Groups-pp. 26-33

- Understand: Using multiplication to solve problems involving equal groups
- Understand: Using division to find the number of equal groups
- Understand: Using division to find the number in each group


## Grade 3 Texas Essential Knowledge and Skills for Mathematics

(E) represent real-world relationships using number pairs in a table and verbal descriptions.
(6) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties. The student is expected to:
(A) classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language;
SADLIER STANDARDS-BASED PROGRESS MATHEMATICS GRADE 3

Grade 3 Texas Essential Knowledge and Skills for Mathematics
(B) $\begin{aligned} & \text { use attributes to recognize rhombuses, } \\ & \text { parallelograms, trapezoids, rectangles, and } \\ & \text { squares as examples of quadrilaterals and draw } \\ & \text { examples of quadrilaterals that do not belong to } \\ & \text { any of these subcategories; }\end{aligned}$
(D) decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area; and

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 35 Understand Shapes and Attributes-pp. 312-319

- Understand: Using number of sides and number of vertices to identify polygons
- Understand: Using lengths of sides and right angles to identify special quadrilaterals

Lesson 28 Understand Concepts of Area Measurementpp. 264-271

- Understand: The meaning of area

Lesson 29 Find Areas of Rectangles: Tile and Multiply-pp. 264-271

- Understand: Finding the area of a rectangle

Lesson 33 Problem Solving: Perimeter—pp. 296-303

- Understand: The meaning of perimeter
- Understand: Finding an unknown side length of a polygon

Lesson 34 Problem Solving: Compare Perimeter and
Area-pp. 304-311

- Understand: Areas of different rectangles with the same perimeter
- Understand: Perimeters of different rectangles with the same area

Lesson 29 Find Areas of Rectangles: Tile and Multiply—pp. 264-271

- Understand: Finding the area of a rectangle

Lesson 30 Find Areas of Rectangles: Use the Distributive Property-pp. 272-279

- Understand: Using tiling to show the Distributive Property
- Understand: Using area models to represent the Distributive Property
Lesson 31 Find Areas: Decompose Figures into
Rectangles—pp. 280-287
- Understand: Decomposing figures into rectangles to find their areas
Lesson 32 Problem Solving: Measurement-pp. 288-295
- Understand: Using a drawing to help solve a problem

Lesson 33 Problem Solving: Perimeter-pp. 296-303

- Understand: The meaning of perimeter
- Understand: Finding an unknown side length of a polygon

Lesson 34 Problem Solving: Compare Perimeter and Area-pp. 304-311

- Understand: Areas of different rectangles with the same perimeter
- Understand: Perimeters of different rectangles with the same area

| Grade 3 Texas Essential Knowledge and Skills for Mathematics |  |  | Sadlier Standards-Based Progress Mathematics Grade 3 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (E) | decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape. | Lesson 36 | Partition Shapes to Make Equal Areas-pp. 320327 <br> - Understand: Partitioning a circle into 4 parts with equal area <br> - Understand: Partitioning a rectangle into 8 parts with equal area |
| (7) Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. The student is expected to: |  |  |  |  |
| (A) |  | represent fractions of halves, fourths, and eighths as distances from zero on a number line; | Lesson 18 | Understand Fractions on the Number Line-pp. 158-165 <br> - Understand: Representing a unit fraction on a number line <br> - Understand: Representing a fraction on a number line |
|  |  | Lesson 19 | Understand Equivalent Fractions—pp. 166-173 <br> - Understand: Equivalent fractions on a number line |
|  |  | Lesson 20 | Write Equivalent Fractions—pp. 174-181 <br> - Understand: Using fraction strips to find equivalent fractions <br> - Understand: Using number lines to find equivalent fractions |
|  |  | Lesson 21 | Relate Whole Numbers and Fractions-pp. 182189 <br> - Understand: Recognizing fractions equivalent to whole numbers <br> - Understand: Expressing a whole number as a fraction |
|  |  | Lesson 22 | Compare Fractions: Same Denominator-pp. 190-197 <br> - Understand: Comparing fractions on a number line <br> - Understand: Using fraction strips to compare fractions with the same denominator |
|  | (B) |  | determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems; | Lesson 33 | Problem Solving: Perimeter-pp. 296-303 <br> - Understand: The meaning of perimeter <br> - Understand: Finding an unknown side length of a polygon |
|  |  |  |  | Lesson 34 | Problem Solving: Compare Perimeter and <br> Area-pp. 304-311 <br> - Understand: Areas of different rectangles with the same perimeter <br> - Understand: Perimeters of different rectangles with the same area |

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(D) determine when it is appropriate to use measurements of liquid volume (capacity) or weight; and
(E) determine liquid volume (capacity) or weight using appropriate units and tools.

Sadlier Standards-Based Progress Mathematics Grade 3
Lesson 24 Problem Solving: Time—pp. 218-225

- Understand: How to tell and write time
- Understand: How to measure intervals of time

Lesson 10 Problem Solving: Two-Step Problems-pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 25 Problem Solving: Liquid Volumes and Massespp. 226-233

- Understand: How to estimate liquid volume
- Understand: How to estimate mass
- Understand: How to solve problems involving mass

Lesson 32 Problem Solving: Measurement-pp. 288-295

- Understand: Using a drawing to help solve a problem

Lesson 3 Problem Solving: Multiplication/Division and Equal Groups-pp. 26-33

- Understand: Using multiplication to solve problems involving equal groups
- Understand: Using division to find the number of equal groups
- Understand: Using division to find the number in each group

Lesson 4 Problem Solving: Multiplication/Division and Arrays-pp. 34-41

- Understand: Using arrays to solve problems
- Understand: Representing problem situations with arrays

Lesson 10 Problem Solving: Two-Step Problems-pp. 88-95

- Understand: Solving a two-step word problem
- Understand: Checking that an answer is reasonable

Lesson 25 Problem Solving: Liquid Volumes and Massespp. 226-233

- Understand: How to estimate liquid volume
- Understand: How to estimate mass
- Understand: How to solve problems involving mass

Lesson 32 Problem Solving: Measurement—pp. 288-295

- Understand: Using a drawing to help solve a problem


## Grade 3 Texas Essential Knowledge and Skills for Mathematics



Sadlier Standards-Based Progress Mathematics Grade 3

Lesson 26 Draw Graphs to Represent Categorical Data—pp. 234-241

- Understand: How to draw picture graphs
- Understand: How to draw bar graphs

Lesson 26 Draw Graphs to Represent Categorical Data-pp. 234-241

- Understand: How to draw picture graphs
- Understand: How to draw bar graphs

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