

# Example Items

## Grade 5

### Mathematics

**Grade 5 Mathematics Example Items** are a **representative set** of items for the ACP. Teachers may use this set of items along with the test blueprint as guides to prepare students for the ACP. On the last page, the correct answer, content SE and SE justification are listed for each item.

*The specific part of an SE that an Example Item measures is **NOT** necessarily the only part of the SE that is assessed on the ACP.* None of these Example Items will appear on the ACP.

Teachers may provide feedback regarding Example Items.

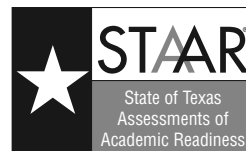
(1) Download the [Example Feedback Form](#) and email it. The form is located on the homepage of [Assessment.dallasisd.org](http://Assessment.dallasisd.org).

OR

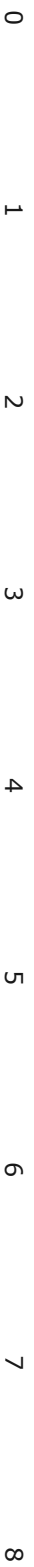
(2) To submit directly, click “Example Feedback” **after** you login to the [Assessment website](#).

First Semester  
2017–2018  
Code #: 1051

# STAAR GRADE 5 MATHEMATICS REFERENCE MATERIALS



Inches



## PERIMETER

Square  $P = 4s$

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Rectangle  $P = 2l + 2w$

## AREA

Square  $A = s \times s$

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Rectangle  $A = l \times w$  or  $A = bh$

## VOLUME

Cube  $V = s \times s \times s$

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Rectangular prism  $V = l \times w \times h$  or  $V = Bh$

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# STAAR GRADE 5 MATHEMATICS REFERENCE MATERIALS



## LENGTH

### Customary

1 mile (mi) = 1,760 yards (yd)

1 yard (yd) = 3 feet (ft)

1 foot (ft) = 12 inches (in.)

### Metric

1 kilometer (km) = 1,000 meters (m)

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

## VOLUME AND CAPACITY

### Customary

1 gallon (gal) = 4 quarts (qt)

1 quart (qt) = 2 pints (pt)

1 pint (pt) = 2 cups (c)

1 cup (c) = 8 fluid ounces (fl oz)

### Metric

1 liter (L) = 1,000 milliliters (mL)

## WEIGHT AND MASS

### Customary

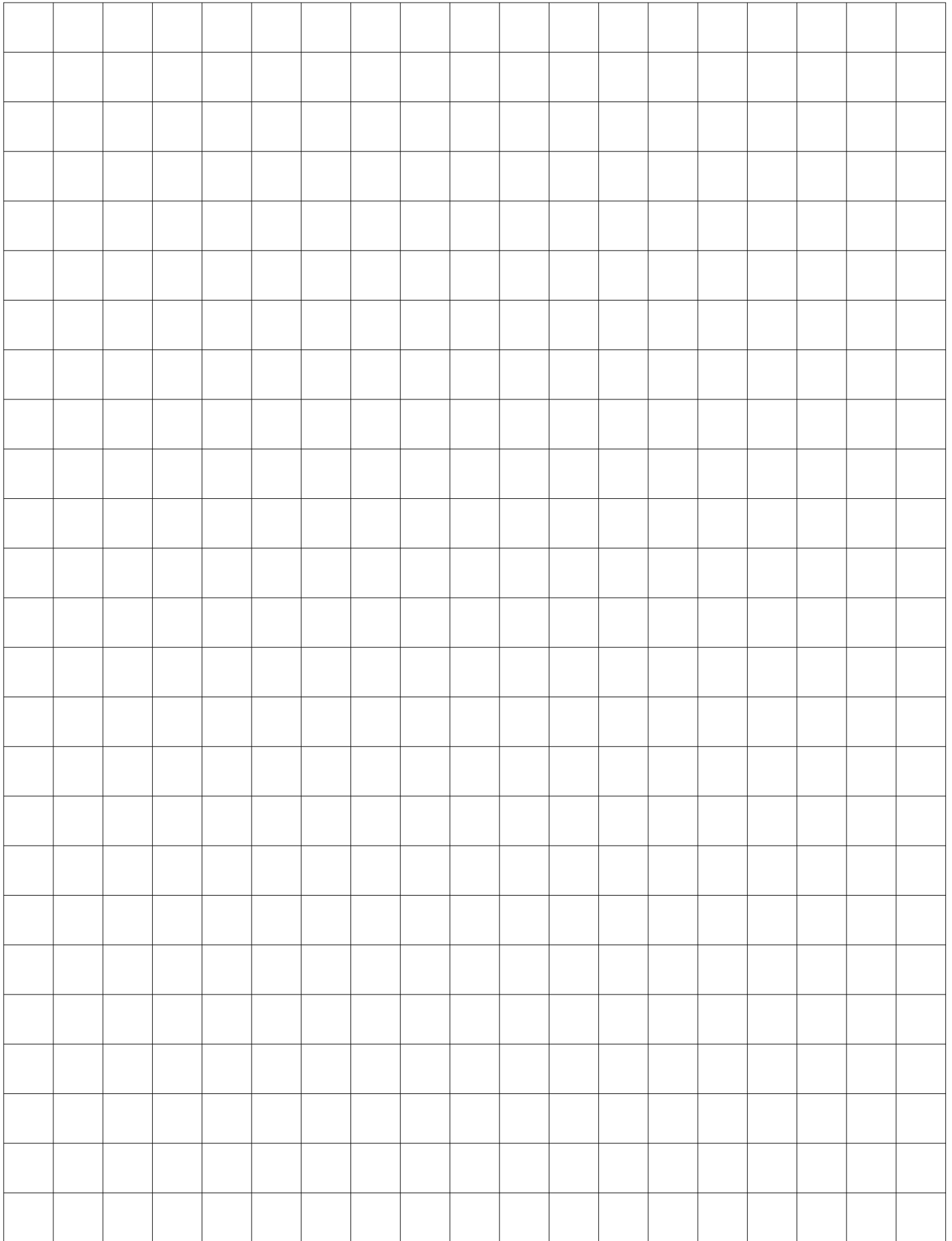
1 ton (T) = 2,000 pounds (lb)

1 pound (lb) = 16 ounces (oz)

### Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)



## EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

1 A Western Gray Kangaroo jumped fifteen and seven hundredths feet. How is this amount written in expanded form?

- A  $(1 \times 10) + (5 \times 1) + (7 \times 0.1)$
- B  $(1 \times 10) + (5 \times 1) + (7 \times 0.01)$
- C  $(1 \times 10) + (5 \times 1) + (7 \times 0.001)$
- D  $(1 \times 10) + (5 \times 1) + (7 \times 0.0001)$

2 Which number sentence is true?

- A  $2.007 < 2.29$
- B  $2.007 > 2.29$
- C  $2.03 > 2.3$
- D  $2.03 = 2.3$

3 The lengths of three boards Ron needs for a project are shown in the table.

| Board | Length(feet)   |
|-------|----------------|
| A     | $4\frac{2}{3}$ |
| B     | $3\frac{5}{6}$ |
| C     | $2\frac{1}{4}$ |

What is the best estimate of the total length in feet of all three boards?

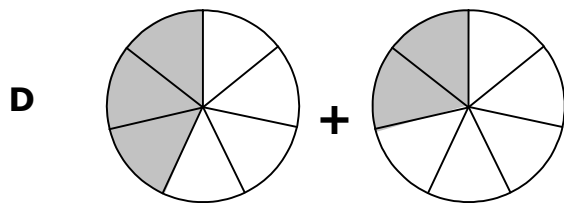
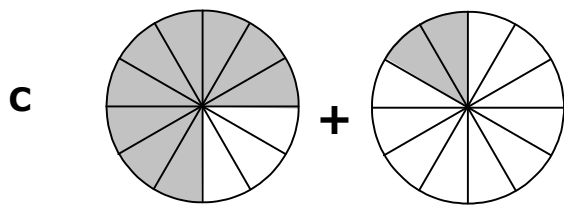
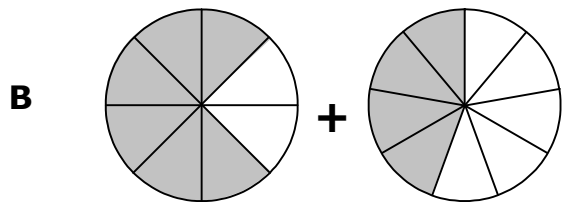
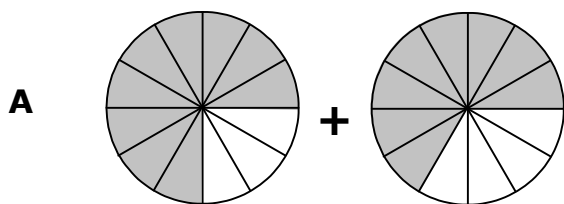
- A 7 feet
- B 9 feet
- C 11 feet
- D 13 feet

## EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

- 4 Patrice counted 124 boxes of pencils in a storage closet. Each box has 15 pencils. How many pencils are there in all?

A 2,360  
B 1,860  
C 744  
D 139

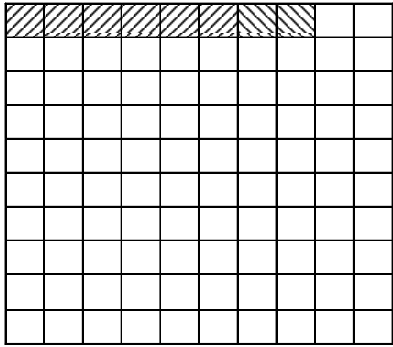
- 5 Which model best represents  $\frac{3}{4} + \frac{2}{3}$ ?



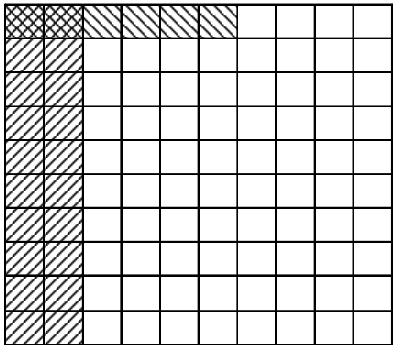
# EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

6 Which model best represents the expression  $0.5 \times 0.2$ ?

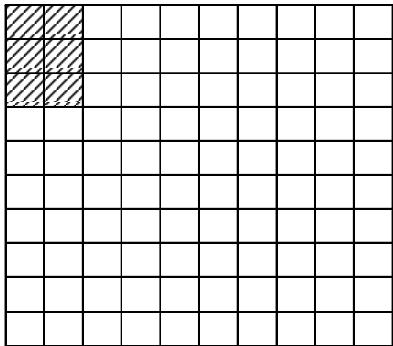
A



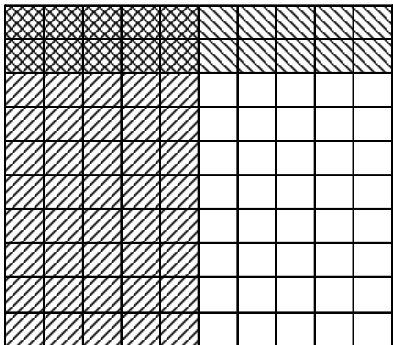
B



C



D



## EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

7 Alize buys 12 boxes of tissue. Each box weighs 3.62 ounces. What is the total weight of the tissue boxes?

- A 434.40 ounces
- B 43.44 ounces
- C 15.62 ounces
- D 10.86 ounces

8 Tula paid \$25.80 for 12 gallons of gasoline. What is the cost for each gallon of gasoline?

- A \$2.01
- B \$2.06
- C \$2.15
- D \$2.18

9 Andres wants to save \$97.50 to go on the fifth grade field trip. He has 15 weeks to save the money. If he saves the same amount of money each week, how much money, in dollars and cents, must Andres save each week?

Record the answer and fill in the bubbles on the grid provided. Be sure to use the correct place value.

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|   |   |   | . |   |   |
| 0 | 0 | 0 |   | 0 | 0 |
| 1 | 1 | 1 |   | 1 | 1 |
| 2 | 2 | 2 |   | 2 | 2 |
| 3 | 3 | 3 |   | 3 | 3 |
| 4 | 4 | 4 |   | 4 | 4 |
| 5 | 5 | 5 |   | 5 | 5 |
| 6 | 6 | 6 |   | 6 | 6 |
| 7 | 7 | 7 |   | 7 | 7 |
| 8 | 8 | 8 |   | 8 | 8 |
| 9 | 9 | 9 |   | 9 | 9 |



## EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

- 10** The table shows the number of people who attended three different baseball games. The total attendance for the three games was 127,776 people.

| Day of the Week | People in Attendance |
|-----------------|----------------------|
| Friday          | ?                    |
| Saturday        | 39,878               |
| Sunday          | 47,929               |

What was the attendance for Friday's game?

- A** 39,969 people
  - B** 40,069 people
  - C** 40,171 people
  - D** 40,969 people
- 11** What is the value of this expression?

$$[16 + (4 \times 2)] \div 8$$

- A** 17
- B** 10
- C** 5
- D** 3

## EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

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- 12** A gravel and sand truck has a carrying capacity of  $6\frac{1}{2}$  cubic meters.



If  $1\frac{3}{4}$  cubic meters have already been dumped, how many cubic meters of gravel and sand remain in the truck?

- A**  $4\frac{1}{4}$  cubic meters
- B**  $4\frac{3}{4}$  cubic meters
- C**  $5\frac{1}{4}$  cubic meters
- D**  $5\frac{3}{4}$  cubic meters
- 13** Eva bought a shirt at the mall. The shirt was priced at \$21.00, but her total bill was \$22.73 because she had to pay a tax. Which tax did Eva pay?
- A** Income tax
- B** Payroll tax
- C** Property tax
- D** Sales tax

## EXAMPLE ITEMS Grade 5 Mathematics, Sem 1

- 14 Use the table to answer the next question.

| Composite Number | Number of Factors |
|------------------|-------------------|
| 4                | 3                 |
| 5                | 2                 |
| 6                | 4                 |
| 7                | 2                 |
| 8                | 4                 |
| 9                | 3                 |
| 10               | 4                 |
| 11               | 2                 |
| 12               | 6                 |
| 13               | 2                 |
| 14               | 4                 |
| 15               | 4                 |
| 16               | 5                 |

Which statement best describes a composite number?

- A** It has exactly 2 factors.
- B** It has an even number of factors.
- C** It has more than 2 factors.
- D** It has an odd number of factors.
- 15 Danny bought 4 packages of juice boxes. Each package had 6 juice boxes. Danny drank 2 juice boxes for breakfast and 1 for lunch. Which equation is used to find,  $b$ , the total number of juice boxes Danny had left?
- A**  $b = (4 + 6) \times (2 + 1)$
- B**  $b = (4 + 6) + (2 \times 1)$
- C**  $b = (4 \times 6) + (2 - 1)$
- D**  $b = (4 \times 6) - (2 + 1)$

**EXAMPLE ITEMS Grade 5 Mathematics Key, Sem 1**

| <b>Item#</b> | <b>Key</b> | <b>SE</b> | <b>Process Skills/SE Justification</b>  |
|--------------|------------|-----------|---|
| <b>1</b>     | B          | 5.2A      | Represent the value of the digit in decimals through the thousandths using expanded notation.   |
| <b>2</b>     | A          | 5.2B      | Compare and order two decimals to thousandths and represent comparisons using the symbols $>$ , $<$ , or $=$ .  |
| <b>3</b>     | C          | 5.3A      | Estimate to determine solutions to mathematical and real-world problems involving addition.   |
| <b>4</b>     | B          | 5.3B      | Multiply with fluency a three-digit number by a two-digit number using the standard algorithm.  |
| <b>5</b>     | A          | 5.3H      | Represent and solve addition of fractions with unequal denominators referring to the same whole using pictorial models and properties of operations.                                  |
| <b>6</b>     | D          | 5.3D      | Represent multiplication of decimals with products to the hundredths using area models.   |
| <b>7</b>     | B          | 5.3E      | Solve for products of decimals to the hundredths using strategies based on properties of operations, and the relationship to the multiplication of whole numbers.                     |
| <b>8</b>     | C          | 5.3G      | Solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm. |
| <b>9</b>     | 6.50       | 5.3G      | Solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm. |
| <b>10</b>    | A          | 5.3K      | Add and subtract positive rational numbers fluently.  |
| <b>11</b>    | D          | 5.4F      | Simplify numerical expressions that do not involve exponents, including up to two levels of grouping.   |
| <b>12</b>    | B          | 5.3K      | Add and subtract positive rational numbers fluently.  |
| <b>13</b>    | D          | 5.10A     | Define, sales tax.  |
| <b>14</b>    | C          | 5.4A      | Identify composite numbers.   |
| <b>15</b>    | D          | 5.4B      | Represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity.                             |