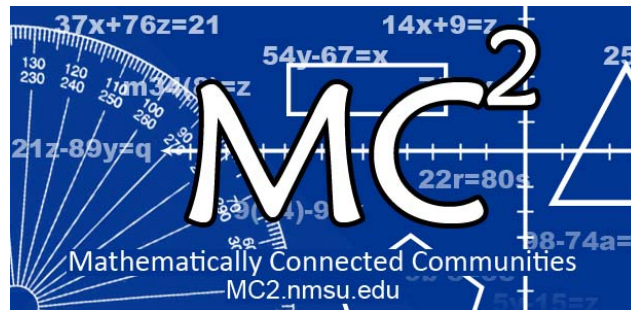


Mathematically Connected Communities



PARCC EOY Practice Test Items 3rd Grade Mathematics

Excerpted 11/2014 from
PARCC Online Practice Tests
www.parcconline.org

Mathematical Practice Questions for MC² Thinking Protocol

Follow the process below in working with the PARCC practice items found in this packet:

1. Choose items from this packet that relate to math concepts studied in the current or previous curriculum units during your math instruction. Each item may be used as a practice item worksheet.
2. Choose a set of **Thinking/Writing Prompts** below based on the math practice the class is working to develop.
3. Add the prompts to the practice item worksheet or display the prompts for the students to respond to.
4. Continue using the same set of prompts for an extended period of time so children develop competence and confidence in describing their mathematical thinking related to the math practice.

The questions below were intentionally not included on each MC² PARCC practice item worksheet in this packet. These are intended to help students move beyond “answer getting” to fully making sense of test item questions and their own mathematical thinking.

Thinking/Writing Prompts to Promote Mathematical Practices

Math Practice 1: Make sense of problems and persevere in solving them.

1. What do you know about the problem?
2. What questions do you have?
3. Explain your reasoning or thinking in solving the problem.

Math Practice 3: Construct viable arguments and critique the reasoning of others.

1. What are the assumptions, definitions, and previous knowledge to help in thinking about this problem?
2. What are some possible conjectures that you have about the problem?
3. Explain your mathematical argument so that somebody else can make sense of your thinking.

Math Practice 4: Model with mathematics.

1. What are the important quantities in the problem that are needed to solve it?
2. What mathematical operation(s) or representation(s) will you use to solve the problem?
3. Explain how you know your answer makes sense in the context of the situation.

Math Practice 6: Attend to precision.

1. What are the important units in the problem? (What are we measuring or counting?)
2. What relationship between the units/quantities do you need to know in order to solve the problem?
3. Use appropriate and precise mathematical language, units, labels and computations to clearly describe your mathematical reasoning.

3rd Grade PARCC EOY Practice Assessment Item #1: Standard 3.MD.1-2

Kevin makes muffins.

- It takes 8 minutes to mix the batter.
- The muffins bake for 17 minutes.
- The muffins then cool for 5 minutes.

What is the total amount of time, in minutes, Kevin spends mixing, baking, and cooling the muffins?

Enter your answer in the box.

 minutes

3rd Grade PARCC EOY Practice Assessment Item #2: Standard 3.OA.1

Which **two** statements can be represented by the expression 4×8 ?

- A. A teacher puts 8 chairs at each of 4 tables.
- B. Tom buys 4 red markers and 8 black markers.
- C. Marie shares her 8 marbles equally among 4 friends.
- D. There are 4 rows of flowers. There are 8 flowers in each row.
- E. There are 8 ducks in the pond. Then, 4 more ducks join them.

3rd Grade PARCC EOY Practice Assessment Item #3: Standard 3.NF.3d

$$\frac{2}{6} < \square$$

Select the **three** fractions that make this comparison true.

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

B. $\frac{2}{8}$

C. $\frac{2}{4}$

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

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

3rd Grade PARCC EOY Practice Assessment Item #4: Standard 3.NBT.3

Which **two** ways show how to find the value of 7×40 ? Select the **two** correct answers.

- A. 7×4
- B. 4×10
- C. $7 \times 4 \times 10$
- D. 7 groups of 4 ones
- E. 7 groups of 4 tens

3rd Grade PARCC EOY Practice Assessment Item #6: Standard 3.MD.3-3

Mr. Conley delivers packages. The bar graph shows the total number of packages he delivered on five days last week.



Part A

What is the total number of packages Mr. Conley delivered on Monday and Tuesday?

- A. 300
- B. 340
- C. 350
- D. 360

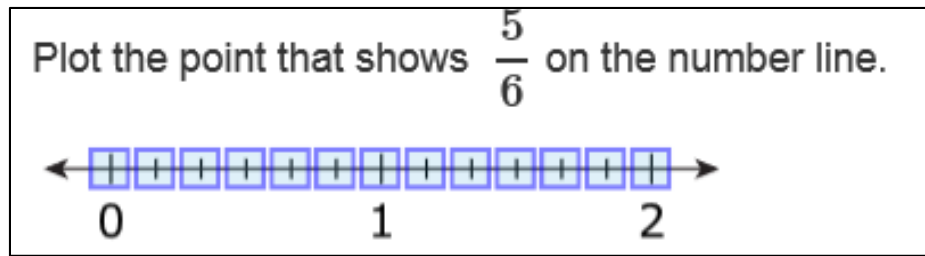
Part B

How many **more** packages did Mr. Conley deliver on Monday and Tuesday than he did on Thursday and Friday?

Enter your answer in the box.

 packages

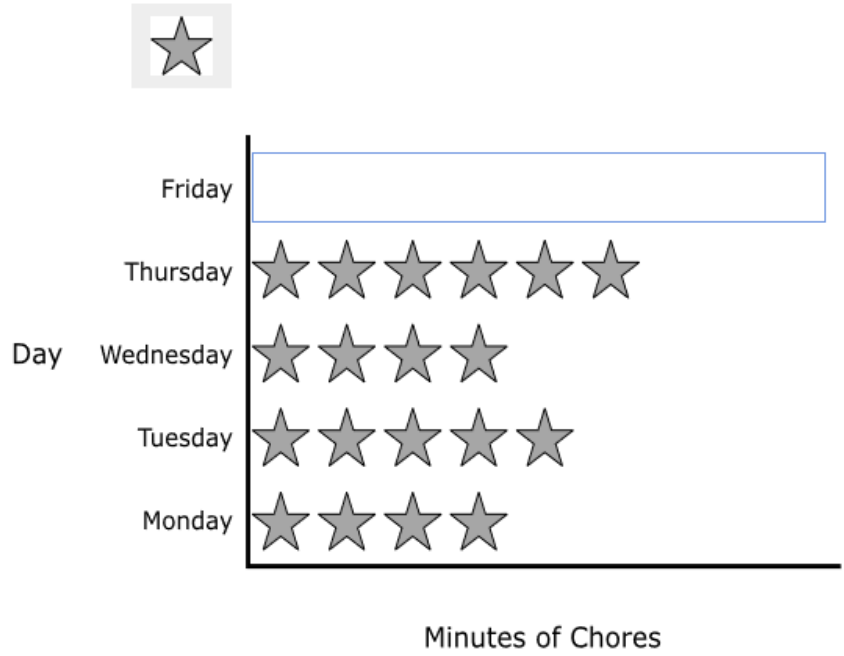
3rd Grade PARCC EOY Practice Assessment Item #8: Standard 3.NF.2



3rd Grade PARCC EOY Practice Assessment Item #9: Standard 3.MD.3-1

Jana gets a sticker for every 5 minutes she spends on her chores each day. She puts them on a picture graph as shown.

Jana spends a total of 130 minutes doing chores during the week. Complete the picture graph to show how many stickers Jana gets on Friday.



3rd Grade PARCC EOY Practice Assessment Item #10: Standard 3.OA.7-2

Enter your answers in the boxes.

$9 \times 9 =$

$56 \div 8 =$

$5 \times 6 =$

$36 \div 9 =$

$63 \div 7 =$

3rd Grade PARCC EOY Practice Assessment Item #11: Standard 3.Int.2

Pablo goes to a stamp show where he can share, buy, and sell stamps.

Part A

The first day, Pablo starts with 744 stamps. He buys 27 stamps from his friend. He then sells 139 stamps.

What is the total number of stamps that Pablo has after the first day of the stamp show?

Enter your answer in the box.

stamps

Part B

The second day, Pablo buys 6 packages of car stamps. Each package has 6 car stamps. Pablo shares these car stamps equally among himself and 3 friends.

What is the total number of car stamps that Pablo and each of his 3 friends receive?

Enter your answer in the box.

stamps

3rd Grade PARCC EOY Practice Assessment Item #12: 3.OA.8-1

Carol plays a ball game. She gets 7 points each time her ball hits a target. If she hits the target at least 5 times in a row, she gets an extra 25 points.

What is the total number of points Carol gets if she hits the target 5 times in a row?

Enter your answer in the box.

Rectangular Snip

points

3rd Grade PARCC EOY Practice Assessment Item #13: Standard 3.NF.1

A flower garden is divided into equal parts. The color of the flowers planted in each part of the garden is shown.

Red	Yellow	Yellow	Purple
Yellow	Red	Pink	Red

Select the **three** statements that are true.

- A. There are red or yellow flowers in $\frac{1}{6}$ of the garden.
- B. Purple flowers are planted in $\frac{7}{8}$ of the garden.
- C. Pink flowers are planted in $\frac{1}{8}$ of the garden.
- D. Each part of the garden is $\frac{1}{8}$ of the whole garden.
- E. There are yellow flowers in $\frac{3}{6}$ of the garden.
- F. Red flowers are planted in $\frac{3}{8}$ of the garden.

3rd Grade PARCC EOY Practice Assessment Item #14: 3.NF.1.2

Enter your answer in the box.

$746 - 397 =$

3rd Grade PARCC EOY Practice Assessment Item #15: 3.Int.1

The owners of a new toy store have 888 puzzles to sell.

- They sell 237 puzzles the first month.
- They sell 461 puzzles the second month.

Part A

Which of these shows the three given numbers, each rounded to the nearest 10?

- A. 880, 230, 470
- B. 880, 230, 460
- C. 890, 240, 470
- D. 890, 240, 460

Part B

Use the rounded numbers to find about how many puzzles the owners have left to sell.

Enter your answer in the box.

puzzles

3rd Grade PARCC EOY Practice Assessment Item #16: 3.OA.7-2

Enter your answers in the boxes.

$7 \times 9 =$

$30 \div 5 =$

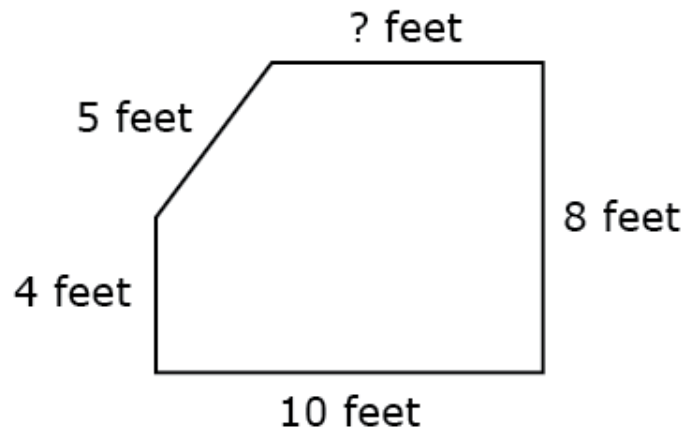
$4 \times 9 =$

$48 \div 6 =$

$42 \div 7 =$

3rd Grade PARCC EOY Practice Assessment Item #18: Standard 3.MD.8

The shape shown has a perimeter of 34 feet.



What is the length of the side that is missing a number?

Enter your answer in the box.

 feet

3rd Grade PARCC EOY Practice Assessment Item #20: Standard 3.OA.4

Enter your answers in the boxes.

$64 \div \boxed{} = 8$

$4 \times 8 = \boxed{}$

$6 \times \boxed{} = 42$

$\boxed{} \div 7 = 5$

3rd Grade PARCC EOY Practice Assessment Item #21: 3.MD.8

Lavina wants to place a fence around a rectangular play area for her rabbits. The play area will be 7-feet long and 4-feet wide.

What is the total length of fence, in feet, Lavina needs to place around the play area?

Enter your answer in the box.

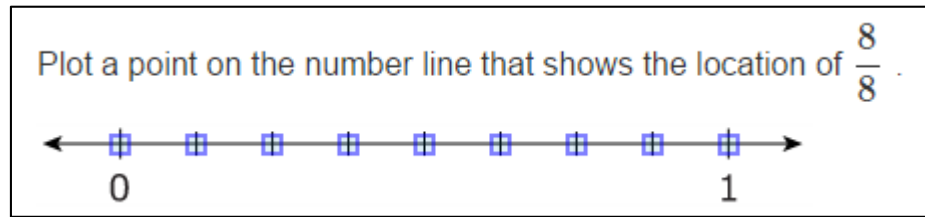
 feet

3rd Grade PARCC EOY Practice Assessment Item #22: Standard 3.OA.2

Which **three** statements can be represented by the expression $24 \div 4$?

- A. Jake makes 24 muffins. He gives away 4 muffins.
- B. Collin has 24 toy trucks. He sorts them into groups of 4 trucks each.
- C. Amira has 24 trading cards. She puts them into piles containing 4 cards each.
- D. Rosemary puts 24 stickers in each book. She uses enough stickers to fill 4 books.
- E. Steven fills a new bookshelf with 24 books. He puts the same number of books on each of the 4 shelves.

3rd Grade PARCC EOY Practice Assessment Item #23: 3.NF.3c



3rd Grade PARCC EOY Practice Assessment Item #25: 3.OA.3-1

Cade has 4 boxes. He puts 9 model cars in each box.

What is the total number of model cars Cade put in these boxes?

Enter your answer in the box.

3rd Grade PARCC EOY Practice Assessment Item #26: 3.MD.2-2

Carla buys apples and peaches at the store. The mass of the apples is 724 grams. The mass of the peaches is 471 grams.

How much greater is the mass of the apples than the mass of the peaches?

Enter your answer in the box.

 grams

3rd Grade PARCC EOY Practice Assessment Item #27: 3.OA.3-3

Ken draws a rectangle with an area of 35-square inches. The width of the rectangle is 5 inches.

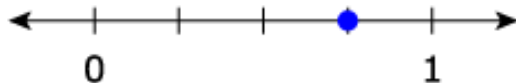
What is the length of Ken's rectangle?

Enter your answer in the box.

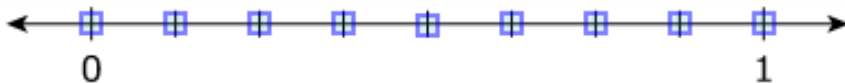
 inches

3rd Grade PARCC EOY Practice Assessment Item #28: 3.NF.3a-2

A fraction is shown on the number line.



Plot a point on this number line to show a fraction that is equivalent to the fraction shown on the other number line.



3rd Grade PARCC EOY Practice Assessment Item #29: 3.G.1

Select the **three** shapes that **always** have at least one pair of parallel sides.

- A. triangle
- B. rhombus
- C. trapezoid
- D. rectangle
- E. quadrilateral

3rd Grade PARCC EOY Practice Assessment Item #30: 3.NF.3b-1

Which **three** comparisons are true?

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

B. $\frac{3}{4} = \frac{6}{8}$

C. $\frac{4}{8} = \frac{1}{2}$

D. $\frac{1}{4} = \frac{4}{8}$

E. $\frac{4}{6} = \frac{2}{3}$

3rd Grade PARCC EOY Practice Assessment Item #31: 3.OA.7-2

Enter your answers in the boxes.

$24 \div 8 =$

$45 \div 5 =$

$6 \times 6 =$

$6 \times 8 =$

3rd Grade PARCC EOY Practice Assessment Item #32: 3.Int.5

On a farm, there is a large storage tank that holds water.

Part A

Each day in May, 60 liters of water are used on the farm.

What is the total amount of water, in liters, used on the farm in 7 days?

Enter your answer in the box.

 liters

Part B

The storage tank holds 500 liters of water when full.

During the first 5 days in January after the tank was filled, 386 liters of water was used on the farm.

What is the amount of water, in liters, that remains in the tank after those 5 days?

Enter your answer in the box.

 liters

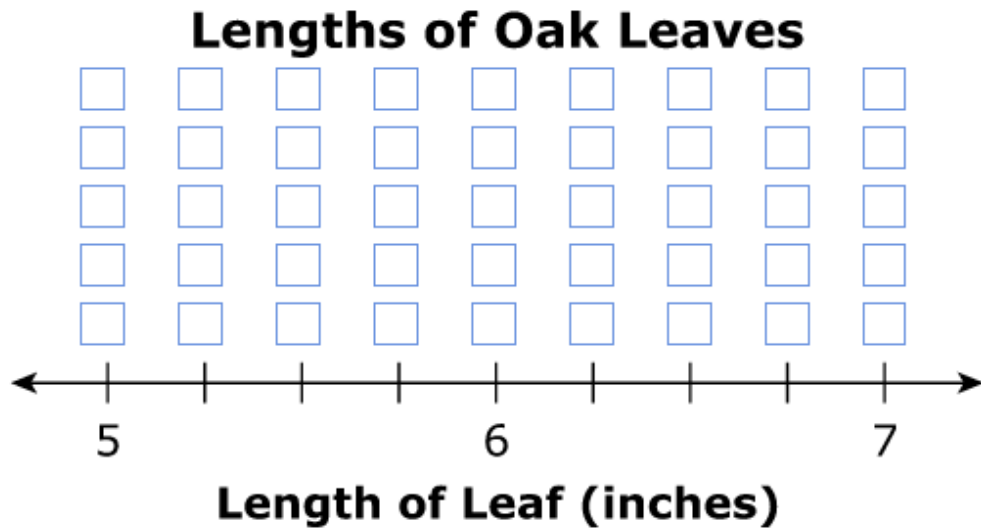
3rd Grade PARCC EOY Practice Assessment Item #33: 3.MD.4

Eric measures 10 oak leaves with a ruler. He records the lengths as shown.

Lengths of Oak Leaves (inches)				
$5\frac{1}{2}$	$6\frac{1}{2}$	$6\frac{1}{2}$	6	$5\frac{3}{4}$
$5\frac{1}{2}$	6	6	$5\frac{1}{2}$	6

For each oak leaf, drag and drop an X onto the line plot to show the length.

X




3rd Grade PARCC EOY Practice Assessment Item #34: Standard 3.NBT.2

Enter your answer in the box.

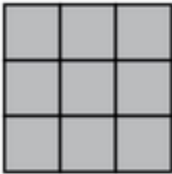
$$512 + \boxed{} = 568$$

3rd Grade PARCC EOY Practice Assessment Item #36: 3.MD.6

Which three figures each have an area of 12-square inches? Select the three correct answers.

 = one square inch

A.



B.



C.



D.



E.



3rd Grade PARCC EOY Practice Assessment Item #37: 3.NBT.3

Enter your answer in the box.

$3 \times 80 =$

3rd Grade PARCC EOY Practice Assessment Item #38: 3.NBT.2

Which expression could be used to find the value of $465 + 229$?

- A. $4 + 2 + 6 + 2 + 5 + 9$
- B. $40 + 20 + 60 + 20 + 5 + 9$
- C. $400 + 200 + 6 + 2 + 5 + 9$
- D. $400 + 200 + 60 + 20 + 5 + 9$

3rd Grade PARCC EOY Practice Assessment Item #39: 3.OA.7-2

Enter your answers in the boxes.

$$\boxed{} = 6 \times 7$$

$$81 \div 9 = \boxed{}$$

$$30 \div 6 = \boxed{}$$

$$\boxed{} = 72 \div 8$$