

3<sup>rd</sup> Grade Items

## 1. Concepts and Procedures

1986

A pencil has a mass of 25 grams. An apple has a mass that is 75 grams more than the pencil.

What is the mass of the apple, in grams?

← → ↶ ↷ ✖

1	2	3
4	5	6
7	8	9
0	.	$\frac{\square}{\square}$

Claim\_\_1\_\_

DOK\_\_2\_\_

## 2. Communicates Reasoning

1988

Does replacing the unknown number with 7 make each equation true?  
Select Yes or No for each equation.

	Yes	No
$6 \times \square = 36$	<input type="checkbox"/>	<input type="checkbox"/>
$8 \times \square = 64$	<input type="checkbox"/>	<input type="checkbox"/>
$49 \div \square = 7$	<input type="checkbox"/>	<input type="checkbox"/>
$54 \div \square = 6$	<input type="checkbox"/>	<input type="checkbox"/>

Claim\_\_3\_\_

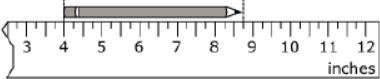
DOK\_\_2\_\_

3. Problem Solving

**2024**

Tracy has a broken ruler, but she can use it to measure the length of her pencil.

What is the length, in inches, of the pencil shown?



A 8 inches  
 B  $7\frac{3}{4}$  inches  
 C 5 inches  
 D  $4\frac{3}{4}$  inches

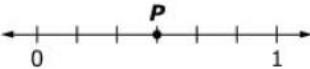
Claim\_\_2\_\_

DOK\_\_2\_\_


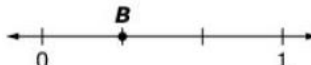
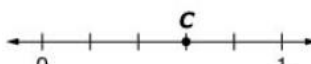
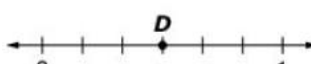
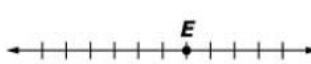
4. Concepts and Procedures

**2015**

Use this number line to solve the problem.



Choose **all** the number lines that show a number equal to the number shown by point *P*.



A   
 B   
 C   
 D   
 E 

Claim\_\_1\_\_

DOK\_\_1\_\_




4<sup>th</sup> Grade Sample Items


5. Modeling and Data Analysis

**592**  

Marcia read books over the summer. She created the picture graph shown.

**Summer Reading**

Month	Books
June	
July	
August	





 = 2 books

Create another picture graph that shows these data with a different key. You may use whole books and half books in your graph.

A. Select the key you will use.




B. Select books to complete your picture graph.

**A. Select the key you will use.**

 = 3 books    = 4 books    = 5 books    = 6 books

**B. New picture graph**



**Summer Reading**

Month	Books
June	
July	
August	

Claim\_\_4\_\_

DOK\_\_3\_\_

6. Problem Solving

**2025**  

A teacher gives 6 students some cards to play a game. She has 52 cards total. The teacher gives each student 1 card until all 52 cards are gone.

How many students get exactly 9 cards?

(A) 2

(B) 4

(C) 5

(D) 6

Claim\_\_2\_\_

DOK\_\_2\_\_

7. Concepts and Procedures

2045

A bottle holds  $\frac{3}{5}$  liter of water. Sam needs 8 full bottles of water to fill his fish tank. How many liters of water does Sam need to fill the fish tank?

- (A)  $2\frac{1}{5}$
- (B)  $4\frac{4}{5}$
- (C)  $7\frac{2}{5}$
- (D)  $8\frac{3}{5}$

Claim \_\_\_1\_\_\_

DOK \_\_\_2\_\_\_

8. Communicating Reasoning

1971

A student claims that all fractions greater than  $\frac{3}{7}$  have a denominator less than 7.

Show that the student's claim is only sometimes true.

A. Drag one number into each box to create a fraction greater than  $\frac{3}{7}$  with a denominator less than 7.

B. Drag one number into each box to create a fraction greater than  $\frac{3}{7}$  with a denominator greater than 7.

0

1

2

3

4

5

6

7

8

9

Delete
✖

**A. Denominator less than 7**

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**B. Denominator greater than 7**

Claim \_\_\_3\_\_\_

DOK \_\_\_2\_\_\_

5<sup>th</sup> Grade Items

9. Problem Solving

2023

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Connor is buying tickets to a concert. The concert he and his friends want to see costs \$4.75 per ticket. Connor has \$26.00 total.

What is the **greatest** number of tickets Connor can buy?

(A) 4


Claim   2    
DOK   2  


10.


1891


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Which fraction model best represents  $4 \times \frac{2}{3}$ ?

(A) 

(B) 


(C) 

(D) 

Concepts and Procedures

Claim   1    
DOK   1

11. Communicates Reasoning

**1890** 

Jasmine solves the equation  $\square \div 4 = 363$  using this area model.


	4	
300		1200
60		<span style="border: 1px solid black; padding: 2px;">?</span>
3		12

Which statement explains how Jasmine should solve for the missing number in the model?

(A) Jasmine should divide 60 by 4.  
 (B) Jasmine should divide 1200 by 12.  
 (C) Jasmine should multiply 2 times 60.

Claim\_\_3\_\_

DOK\_\_3\_\_

**628** 

Tyler is 8 years old. His sister Olivia is 4 years less than twice his age.

Write a numerical expression for Olivia's age.

←
→
↶
↷
✖

1	2	3	+	-	×	÷
4	5	6	<	=	>	
7	8	9	$\square^{\square}$	( )		
0	.	$\frac{\square}{\square}$				

12. Concepts and Procedures

Claim\_\_1\_\_

DOK\_\_2\_\_

