

# Number System

## Task Cards 8.NS.2

20 Task Cards, Recording Sheet, Answer Sheet

**8.NS.2**

Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g.,  $\pi^2$ ).

1

Which of the following numbers falls between 6 and 7 on the number line  $\sqrt{6.5}$  or  $\sqrt{40}$

8.NS.2

2

Which of the following numbers falls between 2 and 3 on the number line  $\sqrt{8}$  or  $\sqrt{12}$

8.NS.2

3

Which of the following numbers falls between 4 and 5 on the number line  $\sqrt{10}$  or  $\sqrt{18}$

8.NS.2

4

Which of the following numbers falls between 8 and 9 on the number line  $\sqrt{75}$  or  $\sqrt{100}$

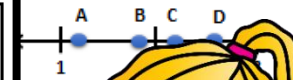
8.NS.2

9

Which point on the number line best represents the  $\sqrt{38}$ ?

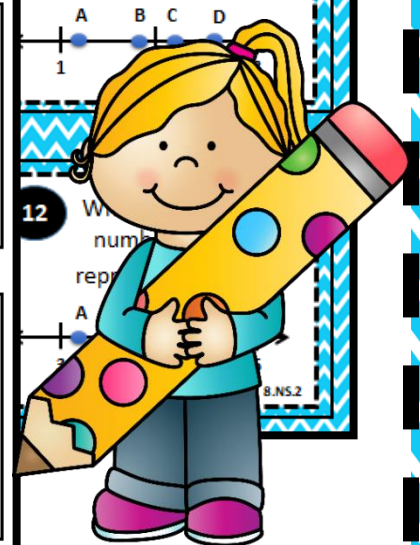
10

Which point on the number line best represents the  $\sqrt{6}$ ?



12

Which point on the number line best represents the  $\sqrt{12}$ ?



Created by:  
Math in the Midwest

# 8.NS.2

Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g.,  $\pi^2$ ).

1

Which of the  
following numbers  
falls between 6 and 7  
on the number line

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8.NS.2

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Which of the  
following numbers  
falls between 8 and 9  
on the number line

$\sqrt{75}$  or  $\sqrt{100}$

8.NS.2

5

What two whole numbers does the  $\sqrt{15}$  fall between

8.NS.2

6

What two whole numbers does the  $\sqrt{8}$  fall between

8.NS.2

7

What two whole numbers does the  $\sqrt{50}$  fall between

8.NS.2

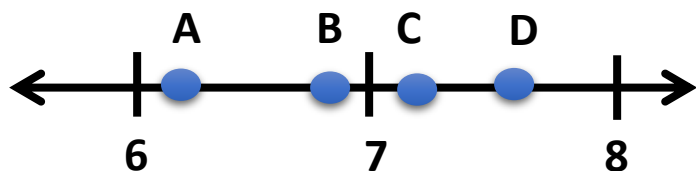
8

What two whole numbers does the  $\sqrt{41}$  fall between

8.NS.2

9

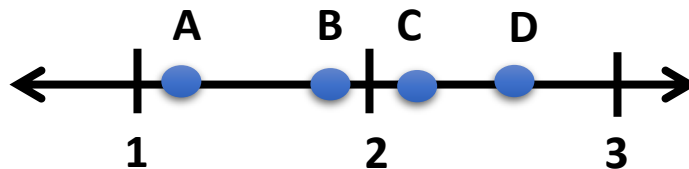
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8.NS.2

10

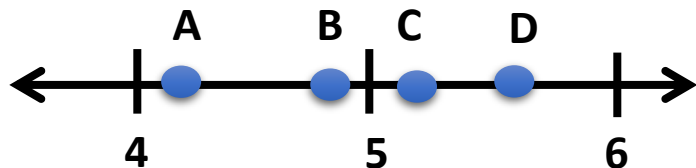
Which point on the number line best represents the  $\sqrt{6}$ ?



8.NS.2

11

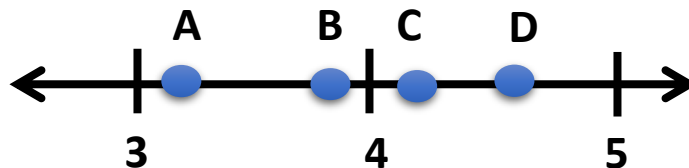
Which point on the number line best represents the  $\sqrt{31}$ ?



8.NS.2

12

Which point on the number line best represents the  $\sqrt{15}$ ?



8.NS.2

**13**

Estimate the  
value of the  $\sqrt{5}$   
to the nearest  
tenth.

8.NS.2

**14**

Estimate the  
value of the  $\sqrt{40}$   
to the nearest  
tenth.

8.NS.2

**15**

Estimate the  
value of the  $\sqrt{39}$   
to the nearest  
tenth.

8.NS.2

**16**

Estimate the  
value of the  $\sqrt{72}$   
to the nearest  
tenth.

8.NS.2

**17**

Fill in the blank with  
the correct  
inequality sign.

$$\sqrt{16} \underline{\hspace{1cm}} 4.5$$

8.NS.2

**18**

Fill in the blank with  
the correct  
inequality sign.

$$\frac{9}{5} \underline{\hspace{1cm}} \sqrt{5}$$

8.NS.2

**19**

Fill in the blank with  
the correct  
inequality sign.

$$\sqrt{9} \underline{\hspace{1cm}} 3$$

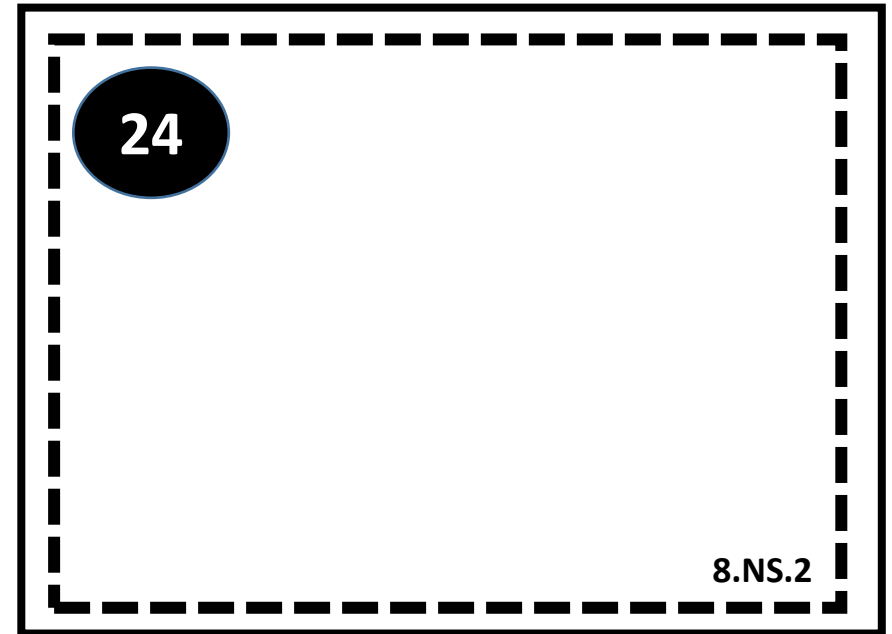
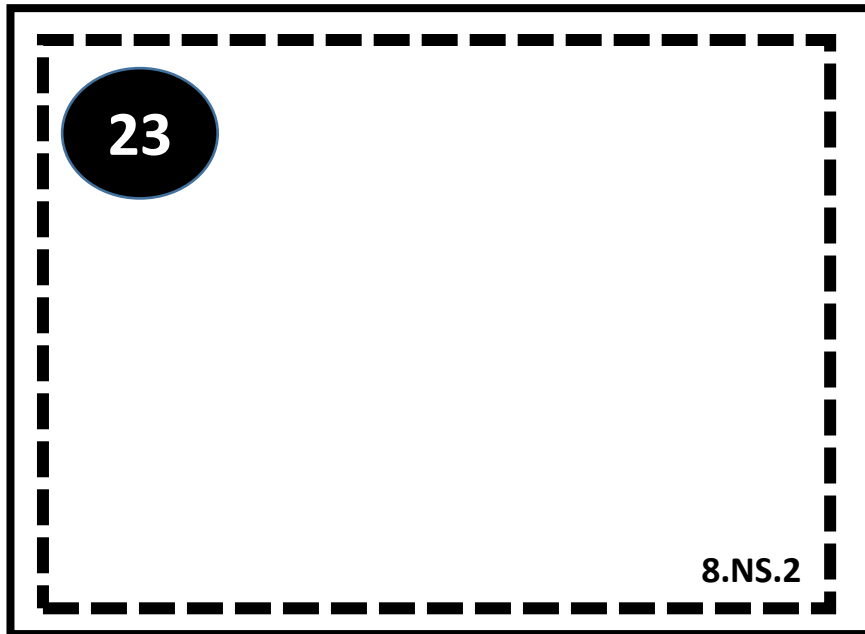
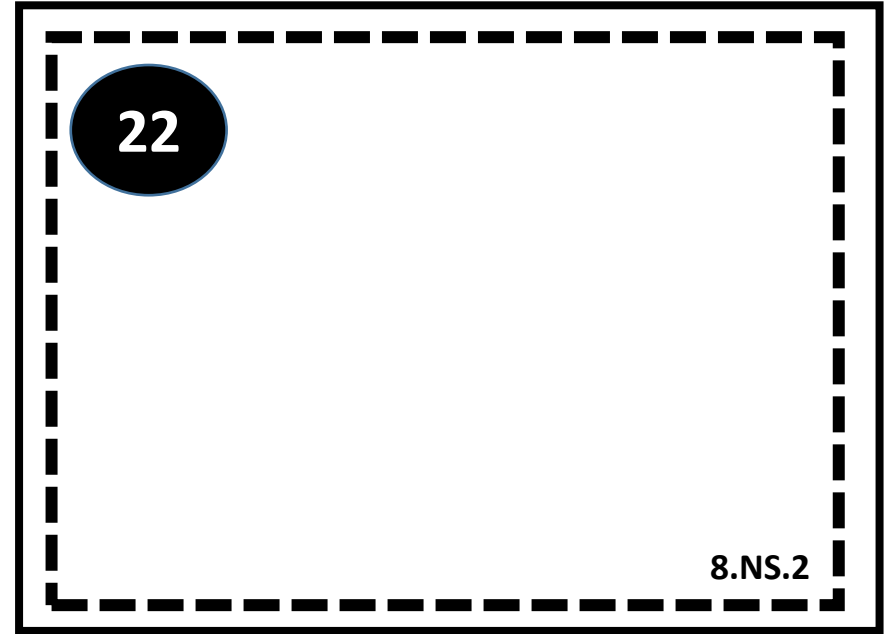
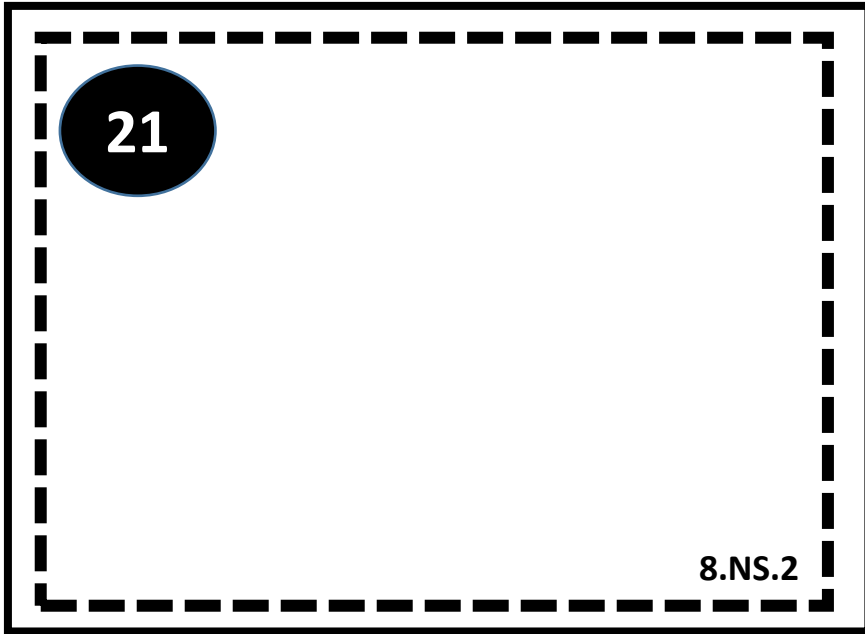
8.NS.2

**20**

Fill in the blank with  
the correct  
inequality sign.

$$-4 \underline{\hspace{1cm}} -\frac{12}{4}$$

8.NS.2





1

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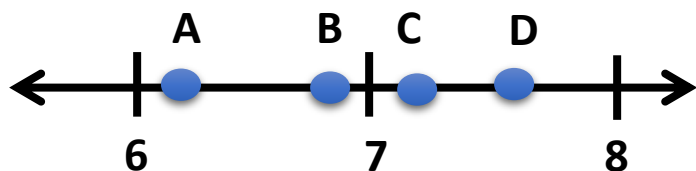
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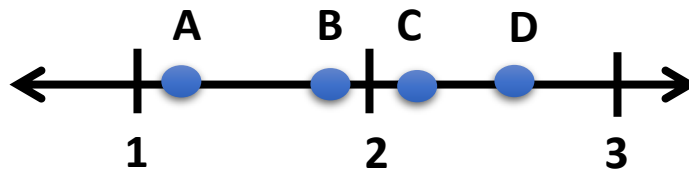
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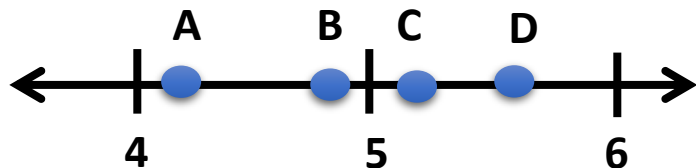
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8.NS.2

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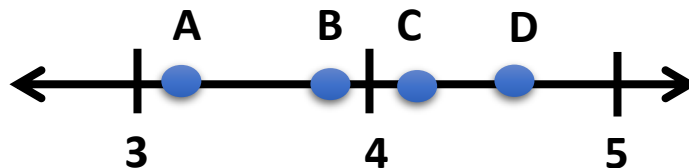
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8.NS.2

21

8.NS.2

22

8.NS.2

23

8.NS.2

24

8.NS.2

Name \_\_\_\_\_

Hour \_\_\_\_\_

# 8.NS.2 Recording Sheet

1.

2.

3.

4.

5.

6.

7.

8.

9.

Name \_\_\_\_\_

Hour \_\_\_\_\_

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.



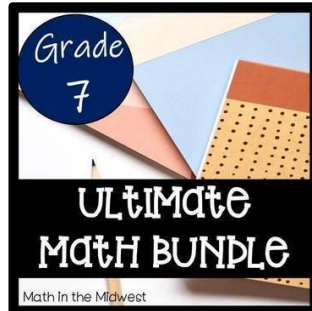
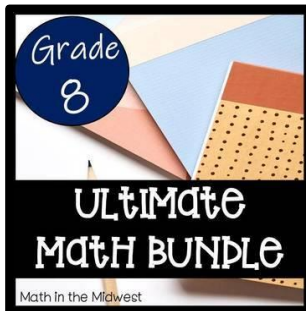
# Answer Key

Number	Answer
1	$\sqrt{40}$
2	$\sqrt{8}$
3	$\sqrt{18}$
4	$\sqrt{75}$
5	3 and 4
6	2 and 3
7	7 and 8
8	6 and 7
9	A
10	D

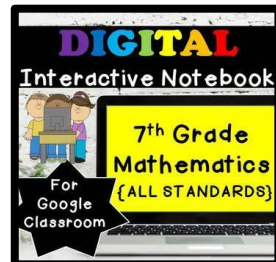
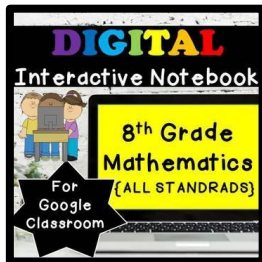
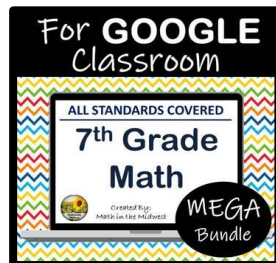
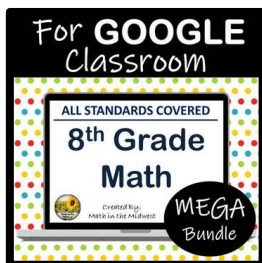
Number	Answer
11	D
12	B
13	2.2
14	6.3
15	6.2
16	8.5
17	<
18	<
19	=
20	<

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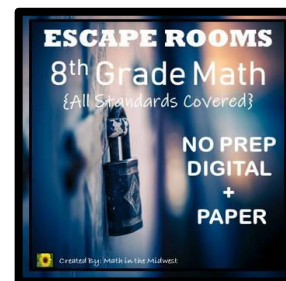
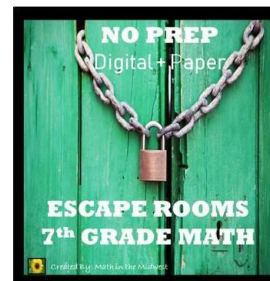
## Ultimate Bundles:



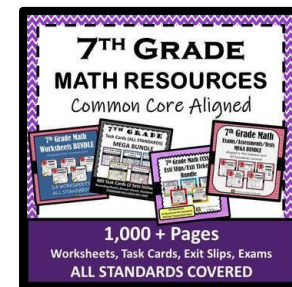
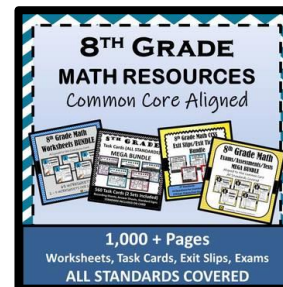
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