6th grade

The equation shown has an unknown number.

$$\square \div \frac{2}{3} = \frac{3}{4}$$

Enter a fraction that makes the equation true.

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

1997

Suppose ∠A is an angle such that $\cos A < \sin A$.
Select **all** angle measures that are possible values
for ∠A.

☐ 25°

☐ 35°

☐ 45°

☐ 55°

☐ 65°

☐ 75°

4th grade

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.
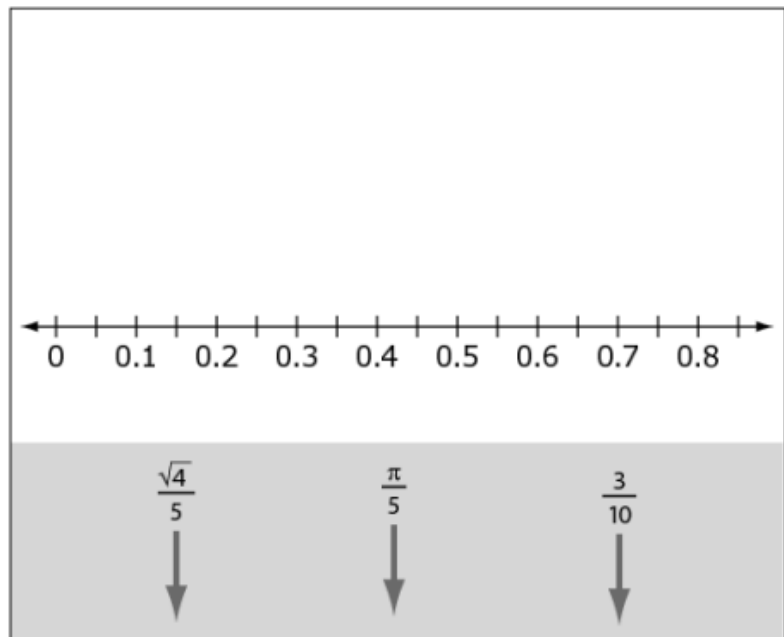
0
1
2
3
4
5
6
7
8
9

Delete

A. Denominator less than 7

$$\frac{\square}{\square}$$

B. Denominator greater than 7

$$\frac{\square}{\square}$$

8th Grade

1860

Drag each number to its correct position on the number line.

$\frac{\sqrt{4}}{5}$ $\frac{\pi}{5}$ $\frac{3}{10}$

1880

Mr. Anthony wants to know how some student athletes are improving in the number of push-ups they can do.

These dot plots show the number of push-ups each student was able to do last month and this month.
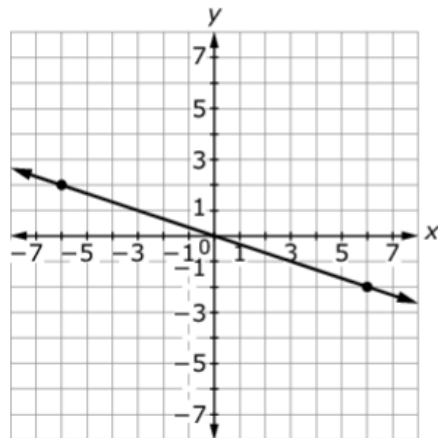
10   15   20   25   30   35   40   45

Number of Push-ups Last Month

10   15   20   25   30   35   40   45
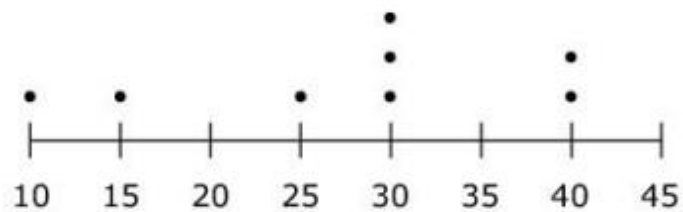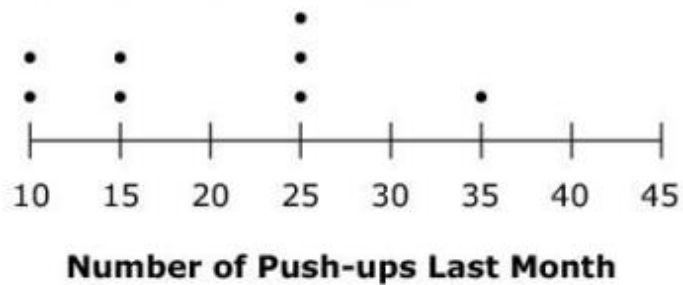
What is the increase in the mean number of push-ups from last month to this month?

1863

Consider this graph of a line.

Enter an equation for the line.

[equation input box]

1 2 3 x y
4 5 6 + - × ÷
7 8 9 < ≤ = ≥ >
0 . - $\frac{\square}{\square}$ $\square^\square$ ( ) | | $\sqrt{\square}$ $\sqrt[\square]{\square}$ π

4th grade

Select **all** the numbers that make this inequality true.

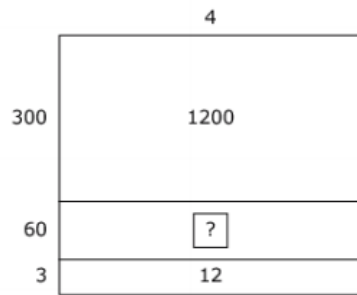$$2\frac{1}{8} > \square + 1 + \frac{1}{8}$$

☐ $\frac{1}{8}$

☐ $\frac{4}{8}$

☐ $\frac{10}{8}$

☐ $\frac{16}{8}$

5th grade

1890

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

	4
300	1200
60	?
3	12

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

Ⓐ Jasmine should divide 60 by 4.

Ⓑ Jasmine should divide 1200 by 12.

Ⓒ Jasmine should multiply 3 times 60.

Ⓓ Jasmine should multiply 4 times 60.

6th grade

1857

Look at the equation.

$$\frac{2}{3} \times \frac{\square}{\square} = n$$

Sarah claims that for any fraction multiplied by $\frac{2}{3}$, n will be less than $\frac{2}{3}$.

To convince Sarah that this statement is only sometimes true:

Part A: Drag one number into each box so the product, n, is less than $\frac{2}{3}$.

Part B: Drag one number into each box so the product, n, is not less than $\frac{2}{3}$.

1
2
3
4
5
6
7
8
9

Delete ✖

Part A: Product n is less than $\frac{2}{3}$

$$\frac{2}{3} \times \frac{\square}{\square} = n$$

Part B: Product n is not less than $\frac{2}{3}$

$$\frac{2}{3} \times \frac{\square}{\square} = n$$

Part A: Product n is less than $\frac{2}{\square}$