

2021-2022 Item and Scoring Samplers

(Due to the cancellation of standardized testing in 2019–2020, the 2021 Item and Scoring Samplers are revised and enhanced versions of the previously released 2017 Item and Scoring Samplers.)

[PSSA Grade 3 Mathematics Item Sampler](#)

PSSA MATHEMATICS GRADE 3

MULTIPLE-CHOICE ITEMS

1. Alex is painting the chairs in a classroom.

So far he has painted 3 of the 8 chairs in the classroom.

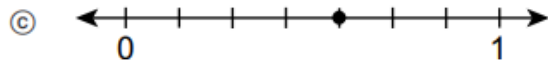
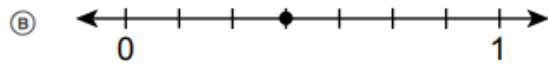
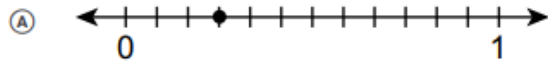
Which statement correctly compares the fraction of painted chairs to the fraction of unpainted chairs?

- (A) $\frac{3}{8} < \frac{5}{8}$
- (B) $\frac{5}{8} < \frac{3}{8}$
- (C) $\frac{8}{3} < \frac{8}{5}$
- (D) $\frac{8}{5} < \frac{8}{3}$

2. Matt measured a peg from one of his games.

The peg was $\frac{3}{4}$ inch in length.

Which number line shows the length, in inches, of Matt's peg?



3. Maddox has a jar with $\frac{2}{6}$ ounce of peanut butter in it.

Which fraction is equal to the amount of peanut butter in the jar?

- (A) $\frac{1}{3}$ ounce
(B) $\frac{2}{3}$ ounce
(C) $\frac{1}{6}$ ounce
(D) $\frac{2}{12}$ ounce

4. Tim put 12 pictures into his scrapbook.

He filled each page with 3 pictures.

Which expression shows the number of pages Tim filled?

- Ⓐ $3 \div 12$
- Ⓑ $4 \div 12$
- Ⓒ $12 \div 4$
- Ⓓ $12 \div 3$

5. The town of Smithville has 5 fire stations.

Each fire station has 4 fire trucks.

How many fire trucks does the town of Smithville have?

- Ⓐ 9
- Ⓑ 16
- Ⓒ 20
- Ⓓ 25

6. Ethan has 2 pencil boxes.

Each pencil box has 7 pencils in it.

The total number of pencils Ethan has can be expressed as 2×7 .

What is another way to show the number of pencils Ethan has?

- Ⓐ $7 \div 2$
- Ⓑ 7×2
- Ⓒ $7 + 2$
- Ⓓ $7 - 2$

7. Joan puts 42 cherries into 6 bowls.

She puts the same number of cherries into each bowl.

The number of cherries in each bowl can be found using the equation shown below.

$$6 \times ? = 42$$

How many cherries are in each bowl?

- Ⓐ 4
 - Ⓑ 5
 - Ⓒ 6
 - Ⓓ 7
8. Some friends are having a picnic at a park.

They take 5 cars to the park.

There are 4 people in each car.

Each person will eat 2 sandwiches at the picnic.

How many sandwiches in total will the friends eat at the picnic?

- Ⓐ 11
- Ⓑ 20
- Ⓒ 22
- Ⓓ 40

9. Which story matches the equation $3 \times 12 - 4 = \square$?

- Ⓐ Kelsey buys 3 pieces of gum.
She buys 12 more pieces of gum.
She gives away 4 pieces of gum.
How many pieces of gum does Kelsey have now?
- Ⓑ Kelsey buys 3 packs of gum.
Each pack has 4 pieces of gum.
She gives away 12 pieces of gum.
How many pieces of gum does Kelsey have now?
- Ⓒ Kelsey buys 3 packs of gum.
Each pack has 12 pieces of gum.
She gives away 4 pieces of gum.
How many pieces of gum does Kelsey have now?
- Ⓓ Kelsey buys 12 packs of gum.
Each pack has 4 pieces of gum.
She gives away 3 pieces of gum.
How many pieces of gum does Kelsey have now?

10. Chris went outside to play at 3:20 P.M.

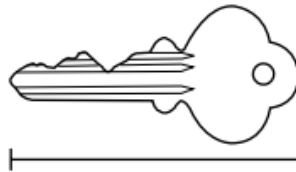
He came back inside at 4:05 P.M.

How many minutes was Chris outside?

- Ⓐ 15
- Ⓑ 25
- Ⓒ 45
- Ⓓ 60

11. Maria's house key is shown below.

House Key



Use your ruler to measure the length of Maria's house key.

Which measurement is **closest** to the length of Maria's house key?

- Ⓐ $\frac{3}{4}$ inch
 - Ⓑ 1 inch
 - Ⓒ $1\frac{3}{4}$ inches
 - Ⓓ 2 inches
12. Rounded to the nearest dollar, Aziza spent \$12.00 on snacks while visiting the zoo.





Which could be the exact amount of money Aziza spent on snacks?


- Ⓐ \$11.47
- Ⓑ \$11.58
- Ⓒ \$12.54
- Ⓓ \$12.61

13. Workers at an apple orchard picked four different types of apples.

They recorded the numbers of bushels of apples picked in the graph below.

Apples Picked at the Orchard

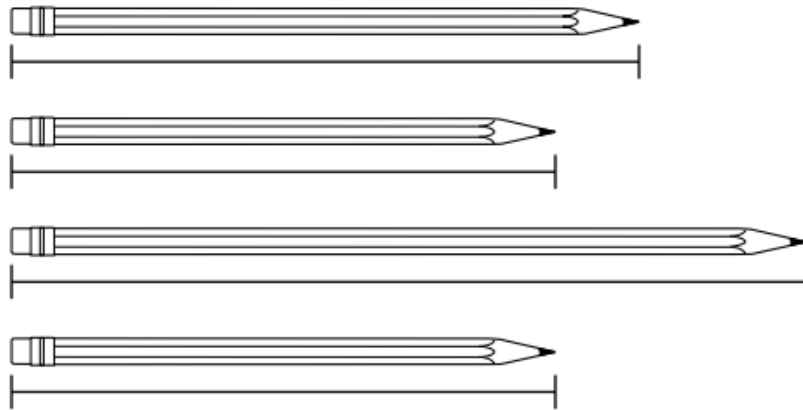
| Type | Number of Bushels Picked |
|--------|--|
| Empire |  |
| Gala |  |
| Rome |  |
| York |  |

Key:  = 5 bushels

How many fewer bushels of Empire apples than York apples were picked?

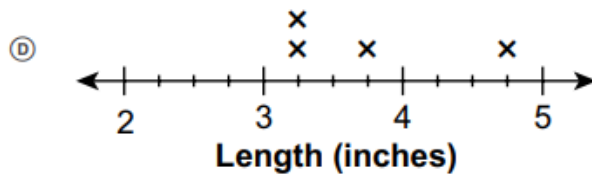
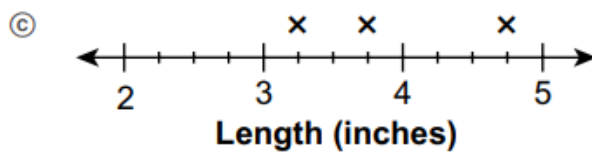
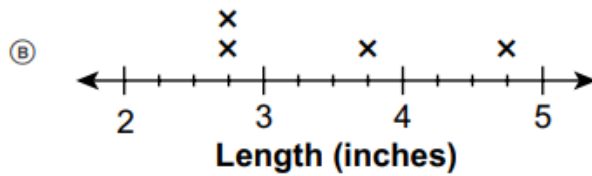
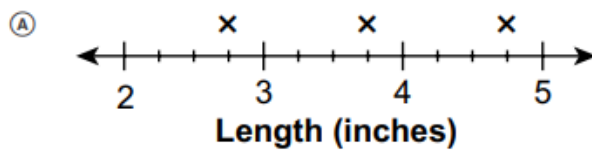
- (A) 3
- (B) 5
- (C) 8
- (D) 15

14. Jonathan measured the lengths of his pencils.



Use your ruler to measure the lengths, in inches, of the pencils.

Which line plot shows the lengths of Jonathan's pencils?



15. The tally chart below shows the number of students who chose each type of seed for a science experiment.




Science Experiment


| Type of Seed | Number of Students |
|--------------|--------------------|
| bean | |
| mustard | |
| sunflower | |

Which pictograph also shows the number of students who chose each type of seed for the science experiment?

(A)




Science Experiment


| Type of Seed | Number of Students |
|--------------|---|
| bean |  |
| mustard |  |
| sunflower |  |

Key:  = 2 students

(B)




Science Experiment


| Type of Seed | Number of Students |
|--------------|---|
| bean |  |
| mustard |  |
| sunflower |  |

Key:  = 2 students

(C)




Science Experiment


| Type of Seed | Number of Students |
|--------------|---|
| bean |  |
| mustard |  |
| sunflower |  |

Key:  = 2 students

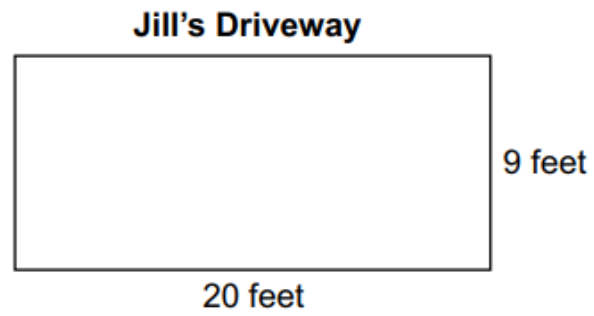
(D)

Science Experiment

| Type of Seed | Number of Students |
|--------------|---|
| bean |  |
| mustard |  |
| sunflower |  |

Key:  = 2 students

16. Jill's driveway is in the shape of the rectangle shown below.



What is the perimeter of Jill's driveway?

- (A) 29 feet
- (B) 58 feet
- (C) 180 feet
- (D) 360 feet

OPEN-ENDED QUESTION

17. Ms. Baker’s class visited the zoo.

The table below shows the weights of the animals the class saw at the zoo.

Animal Weights

| Animal | Weight (pounds) |
|------------|-----------------|
| panda | 275 |
| polar bear | 849 |
| sloth bear | 291 |

A. LIST the weights, in pounds, of the animals in order from **lightest** to **heaviest**.

lightest _____ **heaviest**

Together, the sloth bear and the panda weigh less than the polar bear.

B. How many pounds less is their combined weight than the polar bear’s weight?

PUT your answer in the **BLANK BELOW**.

SHOW or **EXPLAIN** all your work.

Answer: _____ pounds

17. **Continued.** Please refer to the previous page for task explanation.

Ms. Baker asked her students to round the polar bear’s weight to the greatest place value.

One student explained that the polar bear’s weight rounds to 900 because in the number 849, the 9 is bigger than 5, and if a number is 5 or bigger, then the number should be rounded up.

C. **EXPLAIN** the mistake this student made.
