



**THIRD SPACE
LEARNING**

3rd Grade Pennsylvania State Test

State Test Grade 3

Grade 3

Questions

Name:

Class:

Date:

Score:

-
- 1 Martha is selling cookies in her bake sale. She has 8 bags of cookies to sell. Each bag contains 6 cookies. Each bag will cost \$3. Which expression represents how many total cookies she has to sell?

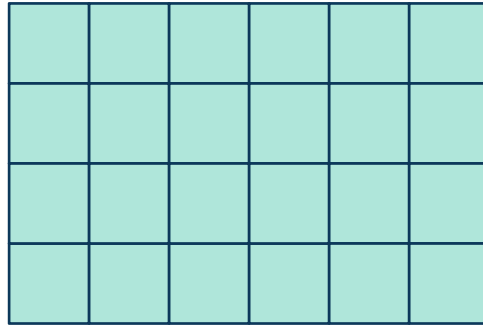
- A. 6×3
- B. 8×3
- C. 6×8
- D. 18×8

-
- 2 A teacher had 60 pencils. She gave 10 of her students 3 pencils each. How many pencils does the teacher have now?

Which equation can be used to solve this problem?

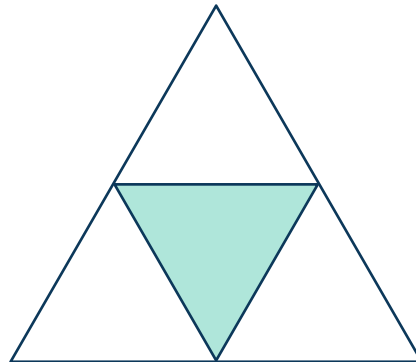
- A. $60 - 10 \times 3 = p$
- B. $(60 - 10) \times 3 = p$
- C. $60 \times 3 - 10 = p$
- D. $60 + 10 \times 3 = p$

3 What is the area of the rectangle?



- A. 24 units
 - B. 24 square units
 - C. 20 units
 - D. 20 square units
-

4



Complete the sentence: The area of the shaded triangle is ____ of the area of the shape.

- A. $\frac{1}{2}$
- B. $\frac{1}{4}$
- C. $\frac{1}{6}$
- D. $\frac{1}{8}$

5 $4 \times 80 = a$

What is the value of a ?

- A. 32
- B. 320
- C. 240
- D. 280

6 What number makes the equations true?

$$7 \times \underline{\hspace{2cm}} = 42$$

$$42 \div 7 = \underline{\hspace{2cm}}$$

- A. 6
- B. 8
- C. 9
- D. 7

7 Which fraction is larger than $\frac{1}{2}$?

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











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


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

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

8

Flower Sales

Monday	  
Tuesday	    
Wednesday	 

 = 6 flowers

How many more flowers were sold on Tuesday than Monday and Wednesday?

A. 12

B. $\frac{1}{2}$

C. 21

D. 3

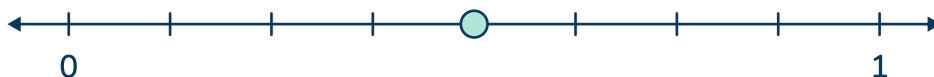
9

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Maria circles the products of 8 in red and shades the products of 4 in green. Which statements about the products are true? Select all the correct answers.

- A. The products of 4 and 8 are always even
- B. The products of 4 and 8 are always odd
- C. All products of 8 are also products of 4
- D. All products of 4 are also products of 8
- E. Half a product of 8 is always a product of 4

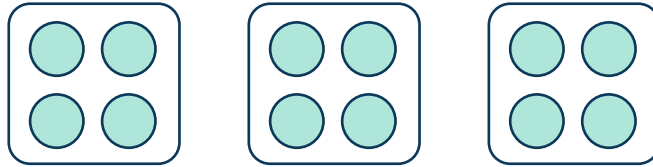
10



Which fraction is equivalent to the value of the point shown?

- A. $\frac{1}{4}$
- B. $\frac{5}{8}$
- C. $\frac{3}{6}$
- D. $\frac{1}{3}$

11



Which problems can be solved by using the model above? Select all the correct answers.

- A. There are 3 bags of muffins. Each bag has 4 muffins. How many muffins are there in total?
- B. Evan collected 4 coins and then another 4. How many coins did he collect in total?
- C. There are 3 books. Each book has 12 pages. How many pages are there in all?
- D. There are 12 students. The students are split into 2 groups. How many students are in each group?
- E. There are 12 markers. There are 3 tables in a classroom. How many markers can each table have?

12

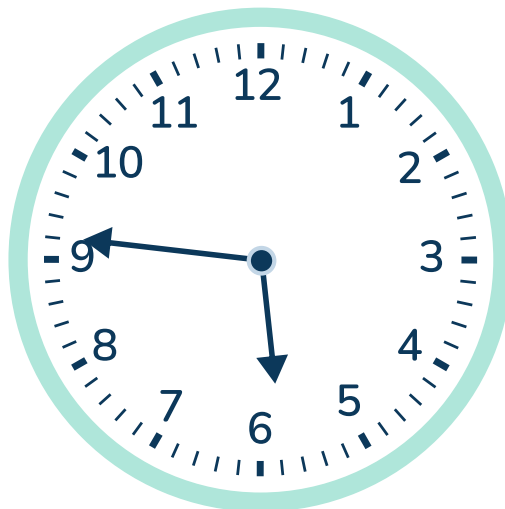
Amanda has 4 house plants. Each house plant needs 2 ounces of water each day. Amanda has 48 ounces in her watering can. How many days can Amanda water her house plants with the water in her watering can?

- A. 8 days
- B. 6 days
- C. 9 days
- D. 12 days

13 What is 4,248 rounded to the nearest hundred?

- A. 4,200
 - B. 4,250
 - C. 4,000
 - D. 4,300
-

14 What time is shown on the clock?



- A. 6:46
- B. 9:29
- C. 5:46
- D. 5:45

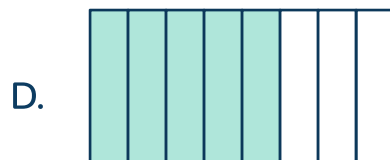
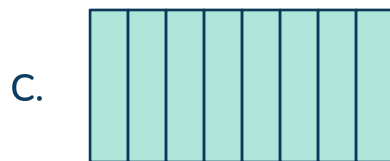
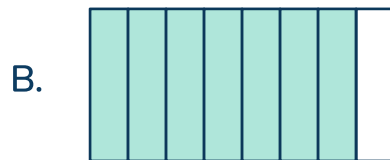
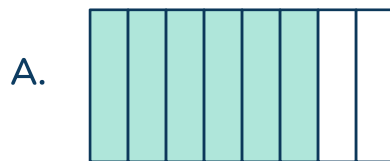
15 Which number line correctly shows the fraction $\frac{3}{4}$?



16 Which is the best estimate for the weight of a raisin?

- A. 150 grams
- B. 1 kilogram
- C. 1 gram
- D. 150 kilograms

- 17 Which shape correctly completes the comparison?



-
- 18 Complete the sentence: A rhombus and quadrilateral both always have...

- A. ...equal sides.
- B. ...four sides.
- C. ...parallel sides.
- D. ...right angles.

- 19 Lina has 16 meters of fence. What are the possible dimensions for a rectangular garden that Lina can completely fence in? Select all the correct answers.

A. 4 meters by 4 meters
B. 8 meters by 8 meters
C. 6 meters by 10 meters
D. 8 meters by 2 meters
E. 4.5 meters by 3.5 meters

-
- 20 Which equation can help you solve $32 \div 8 = \triangle$?

A. $\triangle \div 8 = 32$
B. $\triangle \times 32 = 8$
C. $8 \times \triangle = 32$
D. $8 \div \triangle = 32$

21 Solve $348 - 219$.

- A. 567
- B. 131
- C. 129
- D. 139

22 What is the missing value?

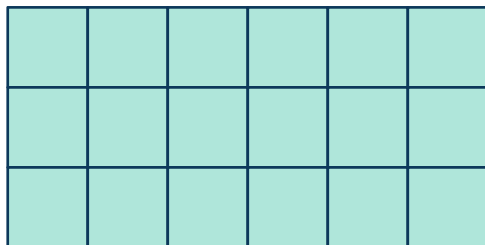


- A. $2\frac{1}{2}$
- B. $\frac{3}{3}$
- C. $\frac{3}{1}$
- D. $\frac{2}{3}$

- 23 Two classrooms are going on a field trip together. There are a total of 36 students going on the field trip. There are 4 buses that will each take the same number of students to their destination. Which equation can be used to find the number of students on each bus?

A. $36 \times 4 = ?$
 B. $36 - 4 = ?$
 D. $36 + 4 = ?$
 E. $36 \div 4 = ?$

-
- 24 The shape below is made of square units.

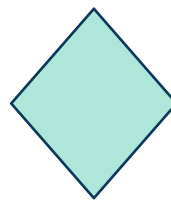
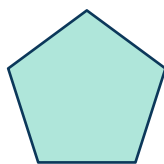
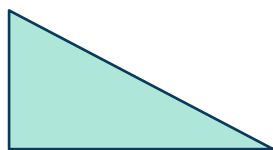


Which expressions can be used to find the area of the shape? Select all the correct answers.

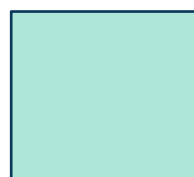
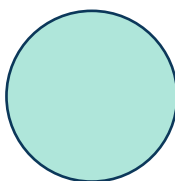
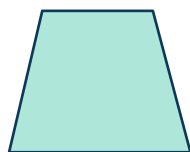
A. $3 + 6 + 3 + 6$
 B. $6 + 6 + 6$
 C. 3×6
 D. $3 + 6$
 E. $3 + 3 + 3 + 3 + 3 + 3$

25 Which group of shapes only has quadrilaterals?

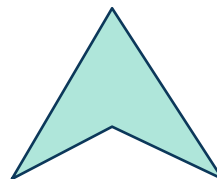
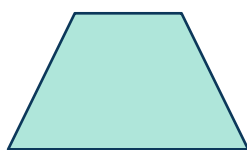
A.



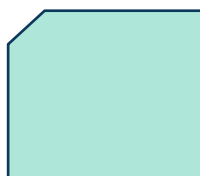
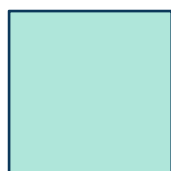
B.



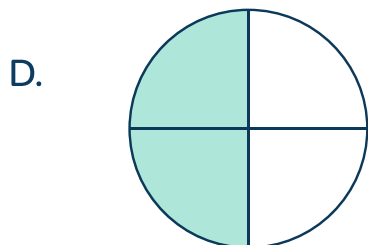
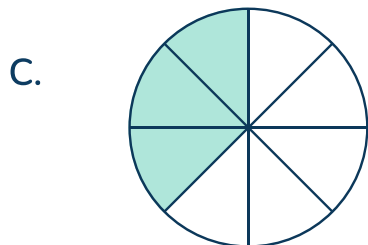
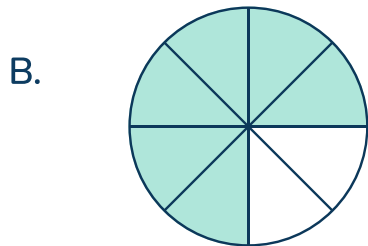
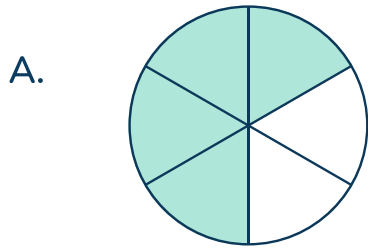
C.



D.



- 26 Which shapes shows a shaded amount equivalent to $\frac{3}{4}$?



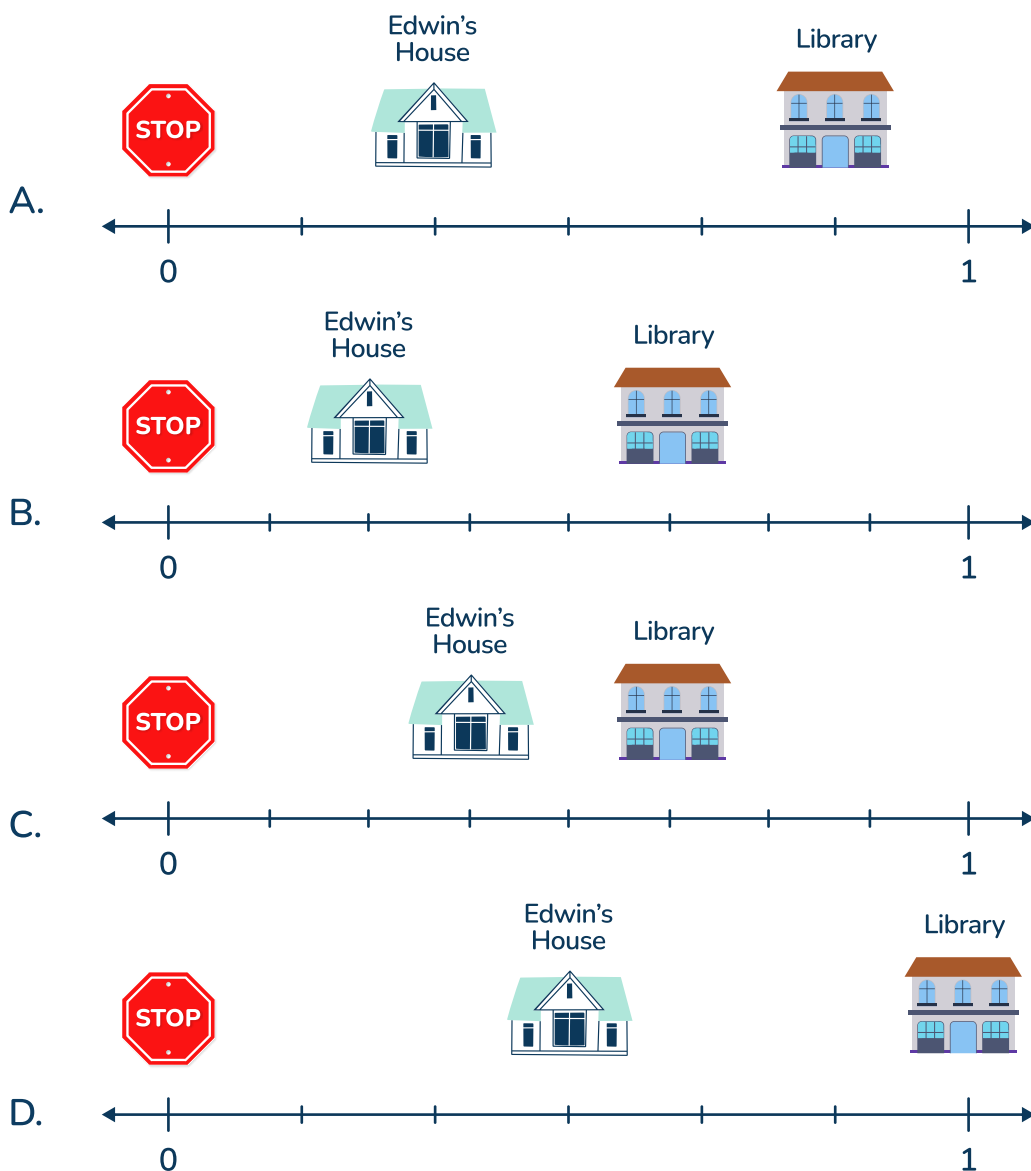
-
- 27 Molly is solving $? \div 4 = 8$. Which equation can help Milo solve?

- A. $8 \div 4 = ?$
- B. $8 \div ? = 4$
- C. $? \times 8 = 4$
- D. $8 \times 4 = ?$

- 28 In one week, Brian ran 13 miles. For the next 4 days, Brian ran 3 miles each day. How many total miles will Brian have run in total?

A. 20 miles
 B. 25 miles
 C. 29 miles
 D. 16 miles

- 29 Edwin lives on a 1 mile street. Edwin lives $\frac{3}{8}$ of a mile from the stop sign. There is a library $\frac{2}{8}$ of a mile from his house. Which number line correctly shows Edwin's house and the library?



30 Round \$17.63 to the nearest dollar.

A. \$17.60

B. \$20

C. \$17

D. \$18

31 Which equation is equivalent to 4×6 ? Select all the correct answers.

A. $6 + 2 + 2$

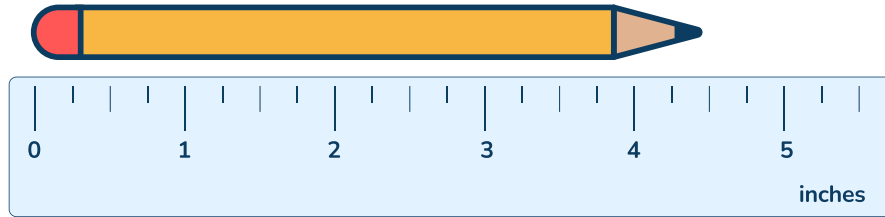
B. $2 \times 2 \times 6$

C. $3 \times 3 \times 4$

D. $6 \times 2 \times 2$

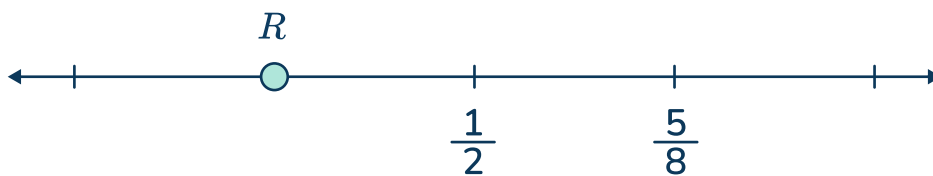
E. 6×4

32 What is the length of the pencil in inches?



- A. 5 inches
- B. $4 \frac{1}{2}$ inches
- C. 4 inches
- D. $4 \frac{3}{4}$ inches

33 Which fraction shows point R?



- A. $\frac{3}{8}$
- B. $\frac{2}{8}$
- C. $\frac{1}{4}$
- D. $\frac{1}{8}$

- 34 Sarah read a book that was 259 pages and another book that was 432 pages. She is 85 pages into a third book. About how many pages did Sarah read?

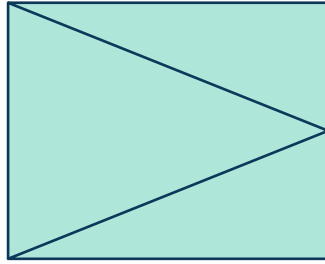
A. 691 pages
B. 606 pages
C. 776 pages
D. 1378 pages

- 35 Aaron worked on his homework, spending 17 minutes reading, 23 minutes finishing his math worksheet, and 16 minutes practicing his spelling words. If he started at 4:43pm, what time did he finish all of his homework?

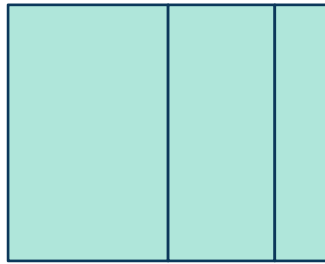
A. 4:56 pm
B. 5:43 pm
C. 5:39 pm
D. 6:12 pm

36 Which rectangle is divided into 3 equal parts?

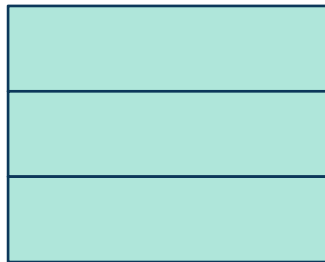
A.



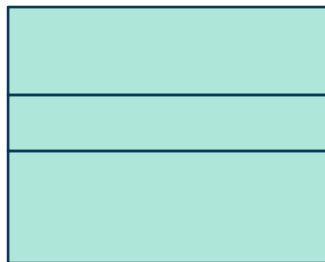
B.



C.



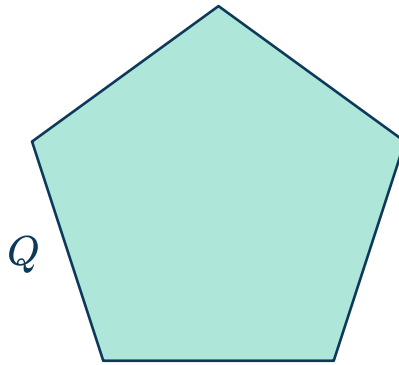
D.



37 Each candy bag has 4 chocolates. There are 32 chocolates in all. How many candy bags are there?

- A. 36 candy bags
- B. 8 candy bags
- C. 9 candy bags
- D. 10 candy bags

- 38 The shape below is a regular pentagon.



Perimeter = 35 feet

What is the length of side Q, in feet, of the regular pentagon?

- A. 7 feet
- B. 5 feet
- C. 8 feet
- D. 9 feet

-
- 39 How can you arrange 12 counters in equal rows? Select all the correct answers.

- A. 3 rows of 4
- B. 4 rows of 8
- C. 12 rows of 12
- D. 6 rows of 2
- E. 9 rows of 3

40 Which context can be represented by $45 \div 9$?

- A. There were 45 books. The library checks out 9 books.
- B. There were 45 books at the library and they received 9 more.
- C. The library has 45 books. They put the same amount of books on each of their 9 shelves.
- D. The town library has 45 books. The larger city library has 9 times as many books.

Standard: CC.2.2.3.A.1, M03.B-O.1.1.1, M03.B-O.1.1.2 M03.B-O.1.2.2

DOK 3

Short Answer Response - 2 points

41 Claire is solving $48 \div 6 = \triangle$. She uses $6 \times \triangle = 48$ to find the value of \triangle . Will this solving strategy work? Why or why not?

Item	KEY	Rationale
41	2 points	The student correctly identifies that Claire's strategy will work and clearly explains the connection between the two equations.
	1 point	The student correctly identifies that Claire's strategy will work but does not clearly explain the connection between the two equations.
	0 points	The student is incorrect or leaves the response blank.

Standard: CC.2.1.3.B.1, M03.A-T.1.1.4

DOK 3

Short Answer Response - 2 points

42 A classroom has spent the entire school year earning points to win prizes at the end of the year. The class was split into teams to collect points, and the team with the greatest number of points at the end of the year gets a pizza party. The points for each team are listed below:

- Team 1: 8,947 points
- Team 2: 8,853 points
- Team 3: 8,953 points
- Team 4: 8,842 points

List the teams in order from least to greatest. Which team gets the pizza party?

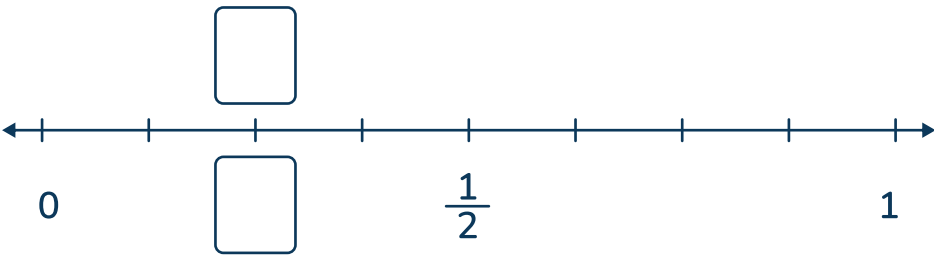
Item	KEY	Rationale
42	2 points	The student correctly lists the teams from least to greatest and names Team 3 as the winner.
	1 point	Student makes 2 mistakes listing the numbers from least to greatest, but still names Team 3 as the winner. Student lists the numbers from greatest to least instead of least to greatest, and names Team 3 as the winner.
	0 points	The student does not list the numbers in the correct order or names Team 3 as the winner or leaves the response blank.e than 2 mistakes or leaves the response blank.

Standard: CC.2.1.3.C.1, M03.A-F.1.1.2, M03.A-F.1.1.3, M03.A-F.1.1.4

DOK 3

Extended Response - 4 points

43 PART A: Fill in the blanks with the two equivalent fractions shown on the number line.



PART B: Show where the fraction $\frac{6}{6}$ belongs on the number line. Explain how you solved.

Item	KEY	Rationale
43	4 points	Student correctly identifies the missing fractions as $\frac{1}{4}$ and $\frac{2}{8}$ or equivalent and $\frac{6}{6}$ as 1. Student clearly explains that 6 sixths is 6 out of 6 and equal to 1 whole.
	3 points	Student correctly identifies the missing fractions as $\frac{1}{4}$ and $\frac{2}{8}$ or equivalent and $\frac{6}{6}$ as 1, but does not clearly explain why $\frac{6}{6}$ is equal to 1 whole.
	2 points	Student correctly identifies 1 of the 2 missing fractions as $\frac{1}{4}$ and $\frac{2}{8}$ or equivalent and $\frac{6}{6}$ as 1. Student explains that 6 thirds is 6 out of 6 and equal to 1 whole.
	1 point	Student incorrectly identifies 2 out of the 3 fractions - the missing fractions or $\frac{6}{6}$.
	0 points	Student does not identify any of the fractions correctly or leaves the response blank.

Answer Key - Multiple Choice

Item number	Correct answer	Standard(s)	DOK
1	C	CC.2.2.3.A.1, M03.B-O.1.1.1	DOK 2
2	A	CC.2.2.3.A.4, M03.B-O.3.1.2, M03.B-O.3.1.6	DOK 2
3	B	CC.2.4.3.A.5, M03.D-M.3.1.1	DOK 1
4	B	CC.2.3.3.A.1, CC.2.3.3.A.2 M03.C-G.1.1.3, CC.2.1.3.C.1, M03.A-F.1.1.1	DOK 2
5	B	CC.2.1.3.B.1, M03.A-T.1.1.3	DOK 1
6	A	CC.2.2.3.A.1, M03.B-O.1.2.2	DOK 1
7	A	CC.2.1.3.C.1, M03.A-F.1.1.5	DOK 1
8	D	CC.2.4.3.A.4, M03.D-M.2.1.2	DOK 2
9	A, C, E	CC.2.2.3.A.4, M03.B-O.3.1.5	DOK 2
10	C	CC.2.1.3.C.1, M03.A-F.1.1.2, M03.A-F.1.1.3	DOK 2
11	A, E	CC.2.2.3.A.1, M03.B-O.1.2.1	DOK 2
12	B	CC.2.2.3.A.4, M03.B-O.3.1.1	DOK 2
13	A	CC.2.1.3.B.1, M03.A-T.1.1.1	DOK 1
14	C	CC.2.4.3.A.2, M03.D-M.1.1.1	DOK 1
15	D	CC.2.1.3.C.1, M03.A-F.1.1.1, M03.A-F.1.1.2	DOK 1
16	C	CC.2.4.3.A.1, M03.D-M.1.2.1	DOK 2
17	C	CC.2.1.3.C.1, M03.A-F.1.1.5	DOK 2

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Item number	Correct answer	Standard(s)	DOK
18	B	CC.2.3.3.A.1, CC.2.3.3.A.2, M03.C-G.1.1.1	DOK 2
19	A, E	CC.2.4.3.A.6, M03.D-M.4.1.1	DOK 2
20	C	CC.2.2.3.A.2, M03.B-O.2.2.1	DOK 1
21	C	CC.2.1.3.B.1, M03.A-T.1.1.2	DOK 2
22	C	CC.2.1.3.C.1, M03.A-F.1.1.4	DOK 1
23	E	CC.2.2.3.A.1, M03.B-O.1.1.2	DOK 1
24	B, C, E	CC.2.2.3.A.1, M03.B-O.1.1.1	DOK 2
25	C	CC.2.3.3.A.1, CC.2.3.3.A.2, M03.C-G.1.1.2	DOK 1
26	B	CC.2.1.3.C.1, M03.A-F.1.1.3	DOK 1
27	D	CC.2.2.3.A.1, M03.B-O.1.2.2	DOK 1
28	B	CC.2.2.3.A.1, M03.B-O.1.2.2	DOK 2
29	C	CC.2.1.3.C.1, M03.A-F.1.1.2	DOK 2
30	D	CC.2.4.3.A.3, M03.D-M.1.3.3	DOK 1
31	B, D, E	CC.2.2.3.A.2, M03.B-O.2.1.1, M03.B-O.2.1.2	DOK 2
32	B	CC.2.4.3.A.1, M03.D-M.1.2.3	DOK 1
33	A	CC.2.1.3.C.1, M03.A-F.1.1.2	DOK 1
34	C	CC.2.1.3.B.1, M03.A-T.1.1.2, CC.2.2.3.A.4, M03.B-O.3.1.3	DOK 2
35	C	CC.2.4.3.A.2, M03.D-M.1.1.2	DOK 2

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Item number	Correct answer	Standard(s)	DOK
36	C	CC.2.3.3.A.1, CC.2.3.3.A.2, M03.C-G.1.1.3	DOK 1
37	B	CC.2.2.3.A.1, M03.B-O.1.2.1	DOK 1
38	A	CC.2.4.3.A.6, M03.D-M.4.1.1	DOK 2
39	A, D	CC.2.2.3.A.1, M03.B-O.1.1.1	DOK 1
40	C	CC.2.2.3.A.1, M03.B-O.1.1.2	DOK 1

ANSWERS SORTED BY CCSS STRAND

OA			
1	C	CC.2.2.3.A.1, M03.B-O.1.1.1	DOK 2
2	A	CC.2.2.3.A.4, M03.B-O.3.1.2, M03.B-O.3.1.6	DOK 2
6	A	CC.2.2.3.A.1, M03.B-O.1.2.2	DOK 1
9	A, C, E	CC.2.2.3.A.4, M03.B-O.3.1.5	DOK 2
11	A, E	CC.2.2.3.A.1, M03.B-O.1.2.1	DOK 2
12	B	CC.2.2.3.A.4, M03.B-O.3.1.1	DOK 2
20	C	CC.2.2.3.A.2, M03.B-O.2.2.1	DOK 1
23	E	CC.2.2.3.A.1, M03.B-O.1.1.2	DOK 1
24	B, C, E	CC.2.2.3.A.1, M03.B-O.1.1.1	DOK 2
27	D	CC.2.2.3.A.1, M03.B-O.1.2.2	DOK 1
28	B	CC.2.2.3.A.4, M03.B-O.3.1.1	DOK 2
31	B, D, E	CC.2.2.3.A.2, M03.B-O.2.1.1, M03.B-O.2.1.2	DOK 2
34	D	CC.2.1.3.B.1, M03.A-T.1.1.2, CC.2.2.3.A.4, M03.B-O.3.1.3	DOK 2
37	B	CC.2.2.3.A.1, M03.B-O.1.2.1	DOK 1
39	A, D	CC.2.2.3.A.1, M03.B-O.1.1.1	DOK 1
40	C	CC.2.2.3.A.1, M03.B-O.1.1.2	DOK 1
41	Short Answer Response	CC.2.2.3.A.1, M03.B-O.1.1.1, M03.B-O.1.1.2 M03.B-O.1.2.2	DOK 3

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NBT			
5	B	CC.2.1.3.B.1, M03.A-T.1.1.3	DOK 1
13	A	CC.2.1.3.B.1, M03.A-T.1.1.1	DOK 1
21	C	CC.2.1.3.B.1, M03.A-T.1.1.2	DOK 2
34	C	CC.2.1.3.B.1, M03.A-T.1.1.2, CC.2.2.3.A.4, M03.B-O.3.1.3	DOK 2
42	Short Answer Response	CC.2.1.3.B.1, M03.A-T.1.1.4	DOK 3

NF			
4	B	CC.2.3.3.A.1, CC.2.3.3.A.2 M03.C-G.1.1.3, CC.2.1.3.C.1, M03.A-F.1.1.1	DOK 2
7	A	CC.2.1.3.C.1, M03.A-F.1.1.5	DOK 1
10	C	CC.2.1.3.C.1, M03.A-F.1.1.2, M03.A-F.1.1.3	DOK 2
15	D	CC.2.1.3.C.1, M03.A-F.1.1.1, M03.A-F.1.1.2	DOK 1
17	C	CC.2.1.3.C.1, M03.A-F.1.1.5	DOK 2
22	C	CC.2.1.3.C.1, M03.A-F.1.1.4	DOK 1
26	B	CC.2.1.3.C.1, M03.A-F.1.1.3	DOK 1
29	C	CC.2.1.3.C.1, M03.A-F.1.1.2	DOK 2
33	A	CC.2.1.3.C.1, M03.A-F.1.1.2	DOK 1
43	Short Answer Response	CC.2.1.3.C.1, M03.A-F.1.1.2, M03.A-F.1.1.3, M03.A-F.1.1.4	DOK 3

Pennsylvania State Test | Grade 3 | Answers

MD			
3	B	CC.2.4.3.A.5, M03.D-M.3.1.1	DOK 1
8	D	CC.2.4.3.A.4, M03.D-M.2.1.2	DOK 2
14	C	CC.2.4.3.A.2, M03.D-M.1.1.1	DOK 1
16	C	CC.2.4.3.A.1, M03.D-M.1.2.1	DOK 2
19	A, E	CC.2.4.3.A.6, M03.D-M.4.1.1	DOK 2
30	D	CC.2.4.3.A.3, M03.D-M.1.3.3	DOK 1
32	B	CC.2.4.3.A.1, M03.D-M.1.2.3	DOK 1
35	C	CC.2.4.3.A.2, M03.D-M.1.1.2	DOK 2
38	A	CC.2.4.3.A.6, M03.D-M.4.1.1	DOK 2




G			
4	B	CC.2.3.3.A.1, CC.2.3.3.A.2 M03.C-G.1.1.3, CC.2.1.3.C.1, M03.A-F.1.1.1	DOK 2
18	B	CC.2.3.3.A.1, CC.2.3.3.A.2, M03.C-G.1.1.1	DOK 2
25	C	CC.2.3.3.A.1, CC.2.3.3.A.2, M03.C-G.1.1.2	DOK 1
36	C	CC.2.3.3.A.1, CC.2.3.3.A.2, M03.C-G.1.1.3	DOK 1

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