



**THIRD SPACE
LEARNING**

Back to School Math Quiz

A formative assessment of
Grade 4 content to diagnose
learning gaps and inform
planning for the school year

Grade 5

Questions

Name:

Class:

Date:

Score:

Answer the questions. You can use the space provided below the question for working out if you need it.

1 $85,480 + 5,477 =$

2 $175,421 - 146,538 =$

3 $79 \times 86 =$

4 $117 \times 9 =$

- 5 Write all the factors of 12.

- 6 Circle all of the numbers that make the sentence true:

24 is a multiple of 3 5 2 6 7 8 10 4

- 7 Circle the prime number(s) below.

8 9 11 12 13

- 8 $576 \div 6 =$

- 9 Write $<$, $>$, or $=$ in the box to make the statement true.

289,045

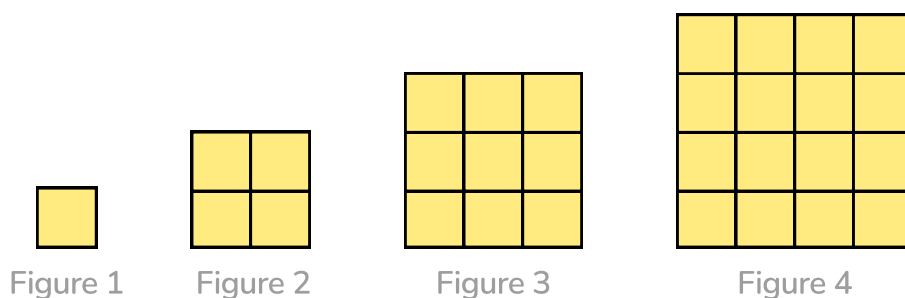
289,450

- 10 Fill in the blank to make the statement true.

In the number 5,045, the digit 5 in the thousands place is
times greater than the 5 in the ones place.

- 11 Round 750,900 to the nearest hundred thousand.

- 12 Look at the figures. If the pattern continues, how many squares will be in figure 10?



- 13 Solve each equation.

a $5\frac{7}{8} - 4\frac{3}{8} =$

b $6\frac{2}{5} + 2\frac{4}{5} =$

- 14 Circle the fraction equivalent to $\frac{8}{12}$

$\frac{2}{4}$ $\frac{2}{3}$ $\frac{6}{10}$ $\frac{5}{6}$

- 15 Write 543,206 in expanded form and word form.

- 16 Reggie's family ate $\frac{3}{10}$ of a pie. The next day they ate $\frac{4}{10}$ of the pie. How much of the pie did they eat altogether?

- 17 A baker is making 8 cakes. Each cake needs $\frac{3}{4}$ cup of flour. How much flour is needed for all 8 cakes?

- 18 $\frac{1}{2} \times 10 =$

- 19 Write $\frac{57}{100}$ as a decimal.

- 20 A sports shop orders 12 boxes of footballs. Each box contains 7 bags of footballs. Each bag contains 9 footballs. How many footballs does the shop order in total?

- 21 A small milkshake costs \$2.00.
A large milkshake costs \$3.00 Cristina orders 2 small milkshakes and 3 large milkshakes. She pays with a \$20 note. How much change does she receive?

- 22 Hannah found 27 seashells on the beach, which was 3 times as many as her brother found. How many seashells did Hannah's brother find?

- 23 A rollercoaster allows 6 in the carriage each time. How many rides would be needed for 130 children?

- 24 Compare the fractions using $<$, $>$ or $=$

$$\frac{1}{4} \quad \square \quad \frac{3}{8}$$

$$\frac{3}{5} \quad \square \quad \frac{7}{10}$$

$$\frac{4}{5} \quad \square \quad \frac{2}{3}$$

- 25 $\frac{6}{10} + \frac{27}{100} =$

Answers

Question number	Question	Answer and Guidance	Standard
1	$85,480 + 5,477 =$	90,957 Since the number of digits in each number is different, check students have added correctly. Also check that students have regrouped correctly where necessary.	4.NBT.4
2	$175,421 - 146,538 =$	28,883 Students should solve using the standard algorithm.	4.NBT.4
3	$79 \times 86 =$	6,794 Students do not need to know the standard algorithm for multiplication yet, but can solve using other strategies such as an area model.	4.NBT.5
4	$117 \times 9 =$	1,053 Check students have regrouped correctly.	4.NBT.5
5	Write all the factors of 12.	1, 2, 3, 4, 6, 12 Students must identify all 6 factors. Encourage students to find factors in pairs.	4.OA.4
6	Circle all of the numbers that make the sentence true: 24 is a multiple of 3/ 5/ 2/ 6/ 7/ 8/ 10/ 4	3, 2, 6, 7, 8, 4	4.OA.4

Question number	Question	Answer and Guidance	Standard
7	Circle the prime number(s) below. 8, 9, 11, 12, 13	11, 13 Students need to identify both prime numbers to be correct.	4.OA.4
8	$576 \div 6 =$	96 Check students are using an appropriate method for division and using regrouping methods correctly.	4.OA.6
9	Write <, >, or = in the box to make the statement true. $289,045 ? 289,450$	<	4.NBT.2
10	Fill in the blank to make the statement true. In the number 5,045, the digit 5 in the thousands place is ? times greater than the 5 in the ones place.	1,000	4.NBT.1
11	Round 750,900 to the nearest hundred thousand.	800,000 Check students have identified the ten thousands digit as the determining number and applied the rounding rule to round up.	4.NBT.3
12	Look at the figures. If the pattern continues, how many squares will be in figure 10?	100 Students should recognize that each figure is a perfect square (1x1, 2x2, etc.) so the 10th figure would be 10x10.	4.OA.5

Answers

Question number	Question	Answer and Guidance	Standard
13	Solve each equation. a) $5\frac{7}{8} - 4\frac{3}{8} =$ b) $6\frac{2}{5} + 2\frac{4}{5} =$	a) $1\frac{4}{8}$ or $1\frac{1}{2}$ Students may simplify the answer but it is not required. b) $9\frac{1}{5}$ When students add, they will get $8\frac{6}{5}$, but they must convert the improper fraction for a final answer of $9\frac{1}{5}$.	4.NF.3c
14	Circle the fraction equivalent to $\frac{8}{6}$	$\frac{2}{3}$	4.NF.1
15	Write 543,206 in expanded form and word form.	Expanded form: $(5 \times 100,000) + 4 \times (10,000) + (3 \times 1,000) + (2 \times 100) + (6 \times 1)$ Word form: Five hundred forty-three thousand two hundred six	4.NBT.2
16	Reggie's family ate $\frac{3}{10}$ of a pie. The next day they ate $\frac{4}{10}$ of the pie. How much of the pie did they eat altogether?	$\frac{7}{10}$ Students should be able to determine the correct operation and then add the fractions.	4.NF.3d
17	A baker is making 8 cakes. Each cake needs $\frac{3}{4}$ cup of flour. How much flour is needed for all 8 cakes?	$8 \times \frac{3}{4} = \frac{24}{4} = 6$ cups of flour	4.NF.4c
18	$\frac{1}{2} \times 10 =$	5 Students are expected to be familiar with simple fractions and begin to find simple fractions of quantities.	4.NF.4

Answers

Question number	Question	Answer and Guidance	Standard
19	Write $\frac{57}{100}$ as a decimal.	0.57 Ensure students have a good understanding of place value and have moved each digit two places in the place value columns.	4.NF.6
20	A sports shop orders 12 boxes of footballs. Each box contains 7 bags of footballs. Each bag contains 9 footballs. How many footballs does the shop order in total?	$12 \times 7 = 84$. Therefore, $84 \times 9 = 756$ footballs Check students read the question carefully to understand that multiplication is required.	4.OA.3
21	A small milkshake costs \$2.00. A large milkshake costs \$3.00 Cristina orders 2 small milkshakes and 3 large milkshakes. She pays with a \$20 note. How much change does she receive?	Expect to see this series of calculations. $\$2.00 \times 2 = \4 $\$3 \times 3 = \9 $\$5 + \$9 = \$13$ $\$20 - \$13 = \$7$ This word problem involves addition, subtraction and multiplication. Check to see if students understood the operation required in each step.	4.OA.3
22	Hannah found 27 seashells on the beach, which was 3 times as many as her brother found. How many seashells did Hannah's brother find?	$27 \div 3 = 9$	4.OA.2

Answers

Question number	Question	Answer and Guidance	Standard
23	A rollercoaster allows 6 in the carriage each time. How many rides would be needed for 130 children?	$130 \div 6 = 21 \text{ r } 4$ So 22 rides are needed. This question assesses students division skills and also their ability to interpret the remainder and identify that rounding is required to provide an accurate answer.	4.OA.3
24	Compare the fractions using <, > or = $\frac{1}{4} ? \frac{3}{8}$ $\frac{3}{5} ? \frac{7}{10}$ $\frac{4}{5} ? \frac{2}{3}$	< < >	4.NF.2
25	$\frac{6}{10} + \frac{27}{100} =$	$\frac{87}{100}$ Students should recognize that $\frac{6}{10}$ is equivalent to $\frac{60}{100}$, which will allow them to add the fractions.	4.NF.5

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