



**THIRD SPACE
LEARNING**

Word Problems

11 division questions to
develop reasoning and
problem solving skills

Grade 4

Questions

Name:

Date:

- 1 José solves $800 \div 10 = 80$. He says “My equation is true, because I know that 80 is 10 times bigger than 800.”

Do you agree with José? Why or why not?

Answer



- 2 Grayson has a collection of 83 rocks. He is placing them into bags of 3. How many bags does he need?

Answer

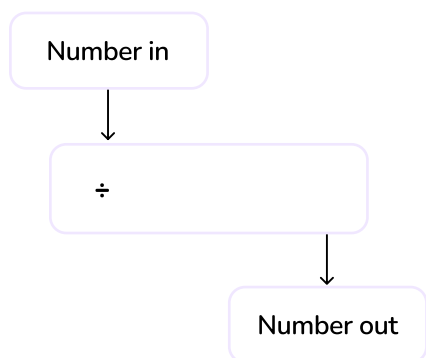


- 3 Elliott works at a plant store. Each pot needs 4 teaspoons of plant food. There is a container with 68 teaspoons of plant food left and a new container with 100 teaspoons of plant food. How many pots can Elliott put plant food in? Write an equation showing the unknown, then solve.

a Equation:

b Answer:

-
- 4 Rebecca has a function machine.
When she puts the number 2,000, the number 200 comes out.
When she puts the number 6,100, the number 610 comes out.



What is the rule for Rebecca's machine?

Answer

- 5 Mr. Khan has organized a trip to a theme park for the whole school. There are 900 children in the school. 1 adult is needed for every 8 children. How many adults are needed to go on the trip?

Answer

- 6 Zayne's strategy for solving $868 \div 7$ is shown below.

$$7 \times 100 = 700$$

$$868 - 700 = 168$$

$$7 \times 7 = 49$$

$$7 \times 14 = 98$$

$$7 \times 21 = 147$$

$$100 + 24 = 124$$

$$7 \times 24 = 168$$

Explain Zayne's strategy and correct any mistakes made.

Answer

- 7 At a factory, each package fits 9 pencils. If there are 3,852 pencils, how many total packages can be filled?

Answer

- 8 $165 \div 6 = 27 \text{ R } 3$, Answer: 3 more

Write a word problem that fits the equation above and has an answer of '3 more.'

Answer

- 9 Talia is made 515 ounces of homemade slime to sell at a fundraiser. She will put it into bags of 3 ounces. When she goes to put the slime in bags 95 ounces have dried up and she can no longer use it. How many bags will she have to sell at the fundraiser?

Write an equation showing the unknown, then solve.

a Equation:

b Answer:

- 10 Children's cough medicine is sold in 375ml bottles. The local pharmacy has a total of 6 liters of child's cough medicine.

a How many bottles of cough medicine does the pharmacy have altogether?

Answer

b If the dose for a child is a 5ml spoonful, how many spoonfuls are there in one bottle?

Answer

Challenge Question!

Cameron wants to read a 144 page book.

- a What possible amounts of pages could he read each day to finish the book?
Give all possible amounts.

Answer



- b Which do you think are most reasonable? Why?

Answer



Answers

Question number	Question	Answers	Standard
1	José solves $800 \div 10 = 80$. He says “My equation is true, because I know that 80 is 10 times bigger than 800.” Do you agree with José? Why or why not?	No, I do not agree with José, because even though his equation is true, he should have said 80 is 10 times smaller than 800.	4.NBT.A.1
2	Grayson has a collection of 83 rocks. He is placing them into bags of 3. How many bags does he need?	28 *solved with place value understanding, properties of operations or models	4.NBT.B.6
3	Elliott works at a plant store. Each pot needs 4 teaspoons of plant food. There is a container with 68 teaspoons of plant food left and a new container with 100 teaspoons of plant food. How many pots can Elliott put plant food in? Write an equation showing the unknown, then solve. a) Equation: b) Answer:	a) $(68 + 100) \div 4 = p$ b) 42 *solved with place value understanding, properties of operations or models	4.NBT.B.6 4.OA.A.3
4	Rebecca has a function machine. When she puts the number 2,000, the number 200 comes out. When she puts the number 6,100, the number 610 comes out. What is the rule for Rebecca’s machine?	The machine divides by 10.	4.NBT.A.1

Question number	Question	Answers	Standard
5	Mr. Khan has organized a trip to a theme park for the whole school. There are 900 children in the school. 1 adult is needed for every 8 children. How many adults are needed to go on the trip?	113 adults *solved with place value understanding, properties of operations or models	4.NBT.B.6
6	Zayne's strategy for solving $868 \div 7$ is shown below. Explain Zayne's strategy and correct any mistakes made.	Zayne started with 100 groups of 7, which is 700. Zayne then subtracted to see that 168 more were needed. Starting with $7 \div 7$, Zayne added more groups of 7 and then finally a group of 3 to figure out that $7 \times 24 = 168$. This means that the 100 groups and the 24 groups of 7 are 124 in total.	4.NBT.B.6
7	At a factory, each package fits 9 pencils. If there are 3,852 pencils, how many total packages can be filled?	428 packages	4.NBT.B.6
8	$165 \div 6 = 27 \text{ R } 3$, Answer: 3 more Write a word problem that fits the equation above and has an answer of '3 more.'	Xander is sharing 165 stickers with 6 friends. How many more stickers does Xander need so that each friend gets the same amount? *Answers will vary	4.NBT.B.6 4.OA.A.3




Question number	Question	Answers	Standard
9	<p>Talia is made 515 ounces of homemade slime to sell at a fundraiser. She will put it into bags of 3 ounces. When she goes to put the slime in bags 95 ounces have dried up and she can no longer use it. How many bags will she have to sell at the fundraiser?</p> <p>Write an equation showing the unknown, then solve.</p> <p>a) Equation: b) Answer:</p>	<p>a) $(515 - 95) \div 3 = 0$ b) 140 bags</p>	<p>4.NBT.B.6 4.OA.A.3</p>
10	<p>Children's cough medicine is sold in 375ml bottles. The local pharmacy has a total of 6 liters of child's cough medicine.</p> <p>a) How many bottles of cough medicine does the pharmacy have altogether? b) If the dose for a child is a 5ml spoonful, how many spoonfuls are there in one bottle?</p>	<p>a) 16 bottles b) 75 spoonful</p>	<p>4.NBT.B.6 4.OA.A.3 4.MD.A.2</p>
Challenge Question	<p>Cameron wants to read a 144 page book.</p> <p>a) What possible amounts of pages could he read each day to finish the book? Give all possible amounts. b) Which do you think are most reasonable? Why?</p>	<p>a) Possibilities: 1 day, 144 pages; 2 days, 72 pages; 3 days 48 pages; 4 days 36 pages; 6 days, 24 pages; 8 days, 18 pages; 9 days, 16 pages; 16 days, 9 pages; 18 days, 8 pages; 24 days, 6 pages; 36 days, 4 pages; 48 days, 3 pages; 72 days, 2 pages; 144 days, 1 page b) Answers will vary, but should be supported with reasoning.</p>	<p>4.NBT.B.6</p>

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- ✓ Differentiated instruction for each student
- ✓ Aligned to your state's standard
- ✓ Scaffolded learning to close gaps

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