WORKSHEET 13
Short Division & Remainders
Year 5 Mathematics — Operations Strand
Australian Curriculum v9.0 — AC9M5N07

Name: _____   **Date:** _____

Section 1: Fluency - Short Division

Question 1: Solve

$$456 \div 3$$

using the short division method.

Answer: _____

Question 2: Calculate

$$1,248 \div 4$$

Answer: _____

Question 3: Solve

$$735 \div 5$$

Answer: _____

Question 4: Calculate

$$2,184 \div 7$$

Answer: _____

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Question 5: Solve

$$963 \div 9$$

Answer: _____

Question 6: Calculate

$$1,536 \div 6$$

Answer: _____

Question 7: Solve

$$848 \div 8$$

Answer: _____

Question 8: Calculate

$$924 \div 4$$

Answer: _____

Division Dynamo!

"You're Dividing Like a Champion!"

Joke Time: Why was 6 afraid of 7? Because 7, 8, 9!

Section 2: Reasoning - Writing Remainders

Question 9: Solve

$$25 \div 4$$

2

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. Write the answer with a remainder (e.g., 6 r 1).

Answer: _____

Question 10: Solve

$$10 \div 4$$

. Write the answer as a decimal.

Answer: _____

Question 11: Calculate

$$47 \div 6$$

. Write the answer with a remainder.

Answer: _____

Question 12: Solve

$$53 \div 8$$

. Write the answer with a remainder.

Answer: _____

Question 13: Calculate

$$29 \div 5$$

. Write the answer as a decimal.

Answer: _____

Question 14: Solve

$$100 \div 7$$

. Write the answer with a remainder.

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Answer: _____

Question 15: Calculate

$$83 \div 9$$

. Write the answer with a remainder.

Answer: _____

Question 16: Solve

$$15 \div 6$$

. Write the answer as a decimal.

Answer: _____

Remainder Rockstars!

"You're Mastering Remainders!"

Joke Time: What did zero say to eight? Nice belt!

Section 3: Challenge - Thinking Backwards

Question 17: A number is divided by 5. The answer is 12 with a remainder of 2. What was the original number?

Answer: _____

Question 18: When I divide a number by 7, I get 8 with a remainder of 3. What is the number?

Answer: _____

4

Question 19: A number divided by 6 gives 15 r 4. Find the original number.

Answer: _____

Question 20: Complete the pattern:

$$560 \div 7 = 80$$

$$630 \div 7 = 90$$

$$700 \div 7 = \text{?}$$

Answer: _____

Question 21: The quotient is 23, the divisor is 4, and the remainder is 1. What is the dividend?

Answer: _____

Question 22: Fill in the missing number:

$$? \div 9 = 34 \text{ r } 5$$

Answer: _____

Question 23: A number divided by 8 equals 19 r 6. What is the number?

Answer: _____

Question 24: If

$$? \div 12 = 25 \text{ r } 7$$

, find the missing number.

Answer: _____

> ### Challenge Champion!
> **"You've Conquered Division!"**
>
> *Joke Time:* Why was the math book so sad? It had too many problems!

Excellent work! Check your answers on the next page.

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WORKSHEET 13
ANSWER KEY

Section 1: Fluency - Short Division

1. 152   **2.** 312   **3.** 147   **4.** 312
5. 107   **6.** 256   **7.** 106   **8.** 231

Section 2: Reasoning - Writing Remainders

9. 6 r 1   **10.** 2.5   **11.** 7 r 5   **12.** 6 r 5
13. 5.8   **14.** 14 r 2   **15.** 9 r 2   **16.** 2.5

Section 3: Challenge - Thinking Backwards

17. 62 (because

$$5 \times 12 + 2 = 62$$

)
18. 59 (because

$$7 \times 8 + 3 = 59$$

)
19. 94 (because

$$6 \times 15 + 4 = 94$$

)
20. 100
21. 93 (because

$$4 \times 23 + 1 = 93$$

)
22. 311 (because

$$9 \times 34 + 5 = 311$$

)
23. 158 (because

$$8 \times 19 + 6 = 158$$

)
24. 307 (because

$$12 \times 25 + 7 = 307$$

)

7

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WORKSHEET 14
Interpreting Remainders
Year 5 Mathematics — Operations Strand
Australian Curriculum v9.0 — AC9M5N07

Name: _____   **Date:** _____

Section 1: Fluency - Division by 10 and 100

Question 1: Calculate

$$4,500 \div 100$$

Answer: _____

Question 2: What is

$$320 \div 10$$

?

Answer: _____

Question 3: Solve

$$8,700 \div 100$$

Answer: _____

Question 4: Calculate

$$750 \div 10$$

Answer: _____

8

Question 5: What is

$$1{,}200 \div 100$$

?

Answer: _____

Question 6: Solve

$$960 \div 10$$

Answer: _____

Question 7: Calculate

$$6{,}300 \div 100$$

Answer: _____

Question 8: What is

$$540 \div 10$$

?

Answer: _____

Division Dynamo!

"You're a Place Value Pro!"

Joke Time: Why did the student do multiplication on the floor? The teacher told them not to use tables!

10

Section 2: Reasoning - Problem Solving with Remainders

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Question 9: A bus holds 20 students. There are 45 students going on a trip. How many buses are needed? Explain why you rounded your answer.

Answer: _____

Question 10: There are 67 pencils to be shared equally among 8 students. How many pencils does each student get? How many are left over?

Answer: _____

Question 11: A rope is 125 cm long. It is cut into pieces that are 15 cm each. How many complete pieces can be cut?

Answer: _____

Question 12: There are 89 lollies. They are put into bags of 6. How many full bags can be made? How many lollies are left over?

Answer: _____

Question 13: A car can hold 5 people. There are 38 people who need a ride. How many cars are needed?

Answer: _____

Question 14: A theater has 150 seats arranged in rows of 12. How many complete rows can be filled?

Answer: _____

Question 15: There are 75 students and each table seats 8 students. How many tables are needed for everyone to sit?

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Answer: _____

Question 16: A baker made 95 cupcakes. He packs them in boxes of 10. How many full boxes does he have? How many cupcakes are left?

Answer: _____

Remainder Rockstars!

"You're Solving Real Problems!"

Joke Time: What's a math teacher's favorite season? Sum-mer!

Section 3: Challenge - Real-World Division

Question 17: A baker has 53 cookies. He puts them into bags of 5. How many full bags can he make? How many cookies are left over?

Answer: _____

Question 18: A school has 156 students. They need to form teams of 12 for sports day. How many complete teams can be formed? How many students will not be in a complete team?

Answer: _____

Question 19: A farmer has 245 eggs. Egg cartons hold 12 eggs each. How many cartons can be completely filled? If he wants to pack all eggs, how many cartons does he need in total?

Answer: _____

11

Question 20: A charity collected $387. They want to donate equal amounts to 9 different organizations. How much money will each organization receive?

Answer: _____

Question 21: There are 1,000 marbles to be divided equally among 8 jars. How many marbles go in each jar? How many marbles are left over?

Answer: _____

Question 22: A concert hall has 15 rows. There are 378 people attending. If they sit equally in each row, how many people sit in each row? (Express as a whole number with remainder)

Answer: _____

Question 23: A pizzeria cuts pizzas into 8 slices. They need to serve 95 people, with each person getting one slice. How many pizzas must they make?

Answer: _____

Question 24: Challenge Problem: A number when divided by 13 gives a quotient of 18 and a remainder of 7. If this same number is divided by 6, what will be the quotient and remainder?

Answer: _____

Challenge Champion!

"You're a Real-World Problem Solver!"

Joke Time: How do you make seven even? Take away the 's'!

Outstanding work! Check your answers on the next page.

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WORKSHEET 14
ANSWER KEY

Section 1: Fluency - Division by 10 and 100

1. 45   **2.** 32   **3.** 87   **4.** 75
5. 12   **6.** 96   **7.** 63   **8.** 54

Section 2: Reasoning - Problem Solving with Remainders

9. 3 buses (

$$45 \div 20 = 2$$

r 5; round up because 5 students need a bus too)
10. 8 pencils each; 3 left over (

$$67 \div 8 = 8$$

r 3)
11. 8 complete pieces (

$$125 \div 15 = 8$$

r 5)
12. 14 full bags; 5 lollies left over (

$$89 \div 6 = 14$$

r 5)
13. 8 cars (

$$38 \div 5 = 7$$

r 3; round up to 8)
14. 12 complete rows (

$$150 \div 12 = 12$$

r 6)
15. 10 tables (

$$75 \div 8 = 9$$

r 3; round up to 10)
16. 9 full boxes; 5 cupcakes left (

$$95 \div 10 = 9$$

14

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r 5)

Section 3: Challenge - Real-World Division

17. 10 full bags; 3 cookies left over (

$$53 \div 5 = 10$$

r 3)

18. 13 complete teams; 0 students not in a team (

$$156 \div 12 = 13$$

)

19. 20 cartons completely filled; 21 cartons needed total (

$$245 \div 12 = 20$$

r 5)

20. \$43 each (

$$387 \div 9 = 43$$

)

21. 125 marbles each; 0 left over (

$$1{,}000 \div 8 = 125$$

)

22. 25 people per row; 3 remaining (

$$378 \div 15 = 25$$

r 3)

23. 12 pizzas (

$$95 \div 8 = 11$$

r 7; round up to 12)

24. First:

$$13 \times 18 + 7 = 241$$

; Then:

$$241 \div 6 = 40$$

r 1

Brilliant!

You've mastered Division & Remainders!
Keep up the fantastic work in Year 5 Maths!

15