



Worksheet 9

Year 3 Mathematics — Australian Curriculum v9.0

Subtopic: Related Division Facts

Name: _____ Date: _____

Score: _____ / 30

Section 1: Fluency — Visual Sharing (Questions 1–10)

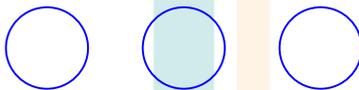
Instructions: Share the items equally onto the plates. Draw them and complete the division.

Question 1: Share 12 stars equally onto 3 plates.

Stars to share:



Plates:



Answer: $12 \div 3 =$ _____

Question 2: Share 10 dots equally onto 2 plates.

Dots to share:



Plates:



Answer: $10 \div 2 =$ _____

Question 3: Share 15 circles equally onto 5 plates. $15 \div 5 =$ ___

Answer: _____

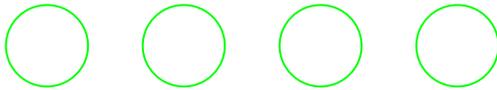


Question 4: Share 20 stars equally onto 4 plates.

Stars to share:



Plates:



Answer: $20 \div 4 =$ _____

Question 5: Share 18 apples equally between 3 children. How many apples does each child get?

Answer: _____

Question 6: Share 16 pencils equally onto 4 desks. $16 \div 4 =$ ____

Answer: _____

Question 7: Share 30 marbles equally between 5 friends.

Answer: $30 \div 5 =$ _____

Question 8: Share 24 chocolates equally onto 6 plates. How many on each plate?



Answer: _____

Question 9: Divide 40 cookies equally among 10 children.

Answer: $40 \div 10 =$ _____

Question 10: Share 35 stickers equally between 5 students. How many stickers each?

Answer: _____



Good Job!

Why did the student eat his homework? Because the teacher said it was a piece of cake!

Section 2: Reasoning — Grouping Problems (Questions 11–20)

Instructions: Circle groups and count how many groups you can make.

Question 11: Circle groups of 4. How many groups can you make from 20 dots?



Answer: $20 \div 4 =$ ___ groups

Question 12: How many groups of 5 are in 30?

Answer: _____



Question 13: Circle groups of 3. How many groups can you make from 15 stars?



Answer: $15 \div 3 = \underline{\quad}$ groups

Question 14: How many groups of 2 are in 18?

Answer: _____

Question 15: A teacher has 24 books. She puts them into piles of 4. How many piles does she make?

Answer: _____

Question 16: How many groups of 10 can you make from 50?

Answer: $50 \div 10 = \underline{\quad}$

Question 17: A baker makes 28 cupcakes. She packs them in boxes of 4. How many boxes does she need?

Answer: _____

Question 18: How many groups of 5 are in 45?



Answer: _____

Question 19: Circle groups of 3. How many groups in 27?

Answer: $27 \div 3 =$ _____

Question 20: A farmer collects 36 eggs. He packs them in cartons of 6. How many cartons does he fill?

Answer: _____



Good Job!

Why don't eggs tell jokes? They'd crack each other up!

Section 3: Challenge — Word Problems (Questions 21–30)

Instructions: Solve these division word problems using reasoning.

Question 21: Start with 24. Share it into 4 equal groups. Now share it into 3 equal groups. Which group size is bigger?

Answer: _____

Question 22: I have 32 lollies. I share them equally between 4 friends. Then I get 8 more lollies and share those equally too. How many lollies does each friend get in total?



Answer: _____

Question 23: A box has 30 crayons. If you divide them into groups of 5, how many groups do you have? If you divide them into groups of 3, how many groups?

Answer: _____

Question 24: Emma has 40 stamps. She gives an equal number to each of her 5 cousins. How many stamps does each cousin receive?

Answer: _____

Question 25: A pizza is cut into 20 slices. 4 children share it equally. How many slices does each child get?

Answer: _____

Question 26: There are 45 students going on an excursion. They need to sit in cars with 5 students in each car. How many cars are needed?

Answer: _____

Question 27: Josh has 28 toy cars. He puts them in equal rows with 4 cars in each row. How many rows does he make?



Answer: _____

Question 28: If 35 oranges are shared equally among 5 baskets, how many oranges are in each basket?

Answer: _____

Question 29: A rope is 50 metres long. It is cut into 10 equal pieces. How long is each piece?

Answer: _____

Question 30: There are 48 flowers. A florist makes bunches with 6 flowers in each bunch. How many bunches can she make?

Answer: _____



Good Job!

What did one plate say to the other plate? Lunch is on me!

Excellent Work! You've completed Worksheet 9!



Answer Key — Worksheet 9

Year 3 Mathematics

Section 1: Fluency

1. $12 \div 3 = 4$
2. $10 \div 2 = 5$
3. $15 \div 5 = 3$
4. $20 \div 4 = 5$
5. 6 apples
6. $16 \div 4 = 4$
7. $30 \div 5 = 6$
8. 4 chocolates
9. $40 \div 10 = 4$
10. 7 stickers

Section 2: Reasoning

11. 5 groups
12. 6 groups
13. 5 groups
14. 9 groups
15. 6 piles
16. $50 \div 10 = 5$
17. 7 boxes
18. 9 groups
19. $27 \div 3 = 9$
20. 6 cartons

Section 3: Challenge

21. Groups of 3 are bigger (8 vs 6)
22. 10 lollies each ($8+2=10$)
23. 6 groups of 5; 10 groups of 3
24. 8 stamps each
25. 5 slices each
26. 9 cars
27. 7 rows
28. 7 oranges
29. 5 metres
30. 8 bunches



Worksheet 10

Year 3 Mathematics — Australian Curriculum v9.0

Subtopic: Related Division Facts

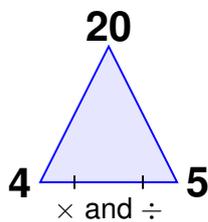
Name: _____ Date: _____

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Section 1: Fluency — Fact Triangles (Questions 1–10)

Instructions: Write the 2 multiplication and 2 division facts for each fact family.

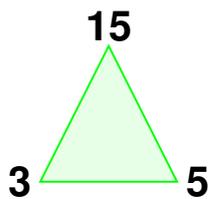
Question 1:



Multiplication facts: _____

Division facts: _____

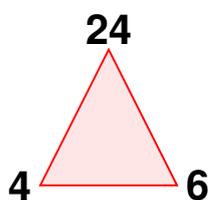
Question 2:



Multiplication facts: _____

Division facts: _____

Question 3:

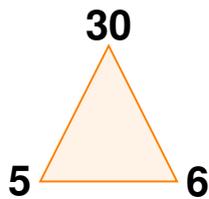




Multiplication facts: _____

Division facts: _____

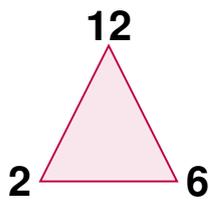
Question 4:



Multiplication facts: _____

Division facts: _____

Question 5:



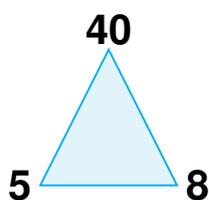
Multiplication facts: _____

Division facts: _____

Question 6: Complete the fact family for: 3, 4, and 12.

Answer: _____

Question 7:





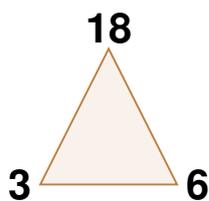
Multiplication facts: _____

Division facts: _____

Question 8: Complete the fact family for: 2, 10, and 20.

Answer: _____

Question 9:



Multiplication facts: _____

Division facts: _____

Question 10: Complete the fact family for: 4, 5, and 20.

Answer: _____



Good Job!

What's a math teacher's favourite place in New York? Times Square!

Section 2: Reasoning — Using Multiplication to Solve Division (Questions 11–20)



Instructions: Use your multiplication knowledge to solve these division problems.

Question 11: I know that $5 \times 6 = 30$. What is $30 \div 5$?

Answer: _____

Question 12: I know that $4 \times 7 = 28$. What is $28 \div 4$?

Answer: _____

Question 13: Fill in the missing number: $___ \div 4 = 3$

Answer: _____

Question 14: Fill in the missing number: $35 \div ___ = 5$

Answer: _____

Question 15: If $3 \times 8 = 24$, what is $24 \div 3$?

Answer: _____



Question 16: Complete: $___ \div 5 = 6$

Answer: _____

Question 17: If $2 \times 9 = 18$, what is $18 \div 2$?

Answer: _____

Question 18: Fill in the missing number: $40 \div ___ = 10$

Answer: _____

Question 19: If $5 \times 7 = 35$, what is $35 \div 7$?

Answer: _____

Question 20: Complete: $___ \div 3 = 10$

Answer: _____



Good Job!

Why was the equal sign so humble? Because it knew it wasn't greater than or less than anyone else!

Section 3: Challenge — Remainder Logic (Questions 21–30)

Instructions: Think about whether division works evenly or if there's a remainder.

Question 21: If I share 13 lollies between 2 people, will it work evenly? Why or why not?

Answer: _____

Question 22: Can you divide 17 apples evenly among 4 children?

Answer: _____

Question 23: Will 25 divide evenly by 5? How do you know?

Answer: _____

Question 24: I have 22 pencils. Can I make equal groups of 5?

Answer: _____



Question 25: Does 30 divide evenly by 4? Explain.

Answer: _____

Question 26: If you have 19 stickers and want to give 3 stickers to each friend, how many friends can get stickers? Will there be any left over?

Answer: _____

Question 27: Can 28 be shared evenly among 5 people?

Answer: _____

Question 28: Which divides evenly: $24 \div 5$ or $24 \div 4$?

Answer: _____

Question 29: I have 32 chocolates. Can I share them evenly into 6 groups?

Answer: _____



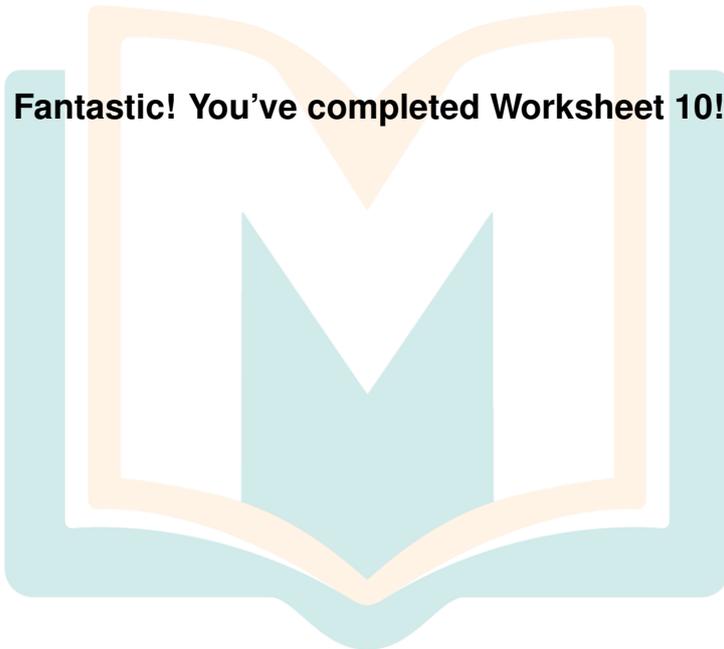
Question 30: Does 45 divide evenly by 10? Why or why not?

Answer: _____



Good Job!

Why did the fraction break up with the decimal? Because it found someone more rational!





Answer Key — Worksheet 10

Year 3 Mathematics

Section 1: Fluency

- $4 \times 5 = 20$, $5 \times 4 = 20$; $20 \div 4 = 5$, $20 \div 5 = 4$
- $3 \times 5 = 15$, $5 \times 3 = 15$; $15 \div 3 = 5$, $15 \div 5 = 3$
- $4 \times 6 = 24$, $6 \times 4 = 24$; $24 \div 4 = 6$, $24 \div 6 = 4$
- $5 \times 6 = 30$, $6 \times 5 = 30$; $30 \div 5 = 6$, $30 \div 6 = 5$
- $2 \times 6 = 12$, $6 \times 2 = 12$; $12 \div 2 = 6$, $12 \div 6 = 2$
- $3 \times 4 = 12$, $4 \times 3 = 12$; $12 \div 3 = 4$, $12 \div 4 = 3$
- $5 \times 8 = 40$, $8 \times 5 = 40$; $40 \div 5 = 8$, $40 \div 8 = 5$
- $2 \times 10 = 20$, $10 \times 2 = 20$; $20 \div 2 = 10$, $20 \div 10 = 2$
- $3 \times 6 = 18$, $6 \times 3 = 18$; $18 \div 3 = 6$, $18 \div 6 = 3$
- $4 \times 5 = 20$, $5 \times 4 = 20$; $20 \div 4 = 5$, $20 \div 5 = 4$

Section 2: Reasoning

- 6
- 7
- 12
- 7
- 8
- 30
- 9
- 4
- 5
- 30

Section 3: Challenge

- No, there will be 1 left over
- No, $17 \div 4 = 4$ remainder 1
- Yes, $5 \times 5 = 25$
- No, $22 \div 5 = 4$ remainder 2
- No, $30 \div 4 = 7$ remainder 2
- 6 friends, 1 sticker left over
- No, $28 \div 5 = 5$ remainder 3
- $24 \div 4$ (equals 6 evenly)
- No, $32 \div 6 = 5$ remainder 2
- No, $45 \div 10 = 4$ remainder 5