Year 4 Week 10 Lesson 4 Can I use table facts to solve division questions?

Fast Five

- 1. 27 x 5 =
- 2. 879 + 7654 =
- 3. 8 x 9 =
- 4. 6739 3654 =
- 5. 67 x 100 =

Fast Five Answers

- 1. $27 \times 5 = 135$
- 2. 879 + 7654 = <mark>8533</mark>
- 3. 8 x 9 = 72
- 4. 6739 3654 = <mark>3085</mark>
- 5. 67 x 100 = 6700

Introduction

Just like with addition and subtraction, multiplication and division facts are connected.

Subtraction is the opposite (or inverse) of addition and multiplication is the opposite (or inverse) of division.

If I have 4 tins and multiply them by 3, I will get 12 tins.



But if I divide my 12 tins by 4, I will have 3 again.



Because division is the inverse of multiplication we can use our times table facts to help us with division.

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| 11 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |

Let's use our times table facts to solve this question:

| 2 times table | | |
|---------------|----|--|
| 1 | 2 | |
| 2 | 4 | |
| 3 | 6 | |
| 4 | 8 | |
| 5 | 10 | |
| 6 | 12 | |
| 7 | 14 | |
| 8 | 16 | |
| 9 | 18 | |
| 10 | 20 | |
| 11 | 22 | |
| 12 | 24 | |

24 ÷ 2

Write down your 2 times table until you get to the number that is being divided.

The biggest multiple of 2 without going over 24 **is 24**. Because there are no remainders, that is

our answer and we can put it down.

24 ÷ 2 = 12

| 3 times table | | |
|---------------|----|--|
| 1 | 3 | |
| 2 | 6 | |
| 3 | 9 | |
| 4 | 12 | |
| 5 | 15 | |

15÷3

Write down your 3 times table until you get to the number that is being divided.

The biggest multiple of 3 without going over 15 is 15. Because there are no remainders, that is our answer and we can put it down. $15 \div 3 = 5$

| 5 times table | | |
|---------------|----|--|
| 1 | 5 | |
| 2 | 10 | |
| 3 | 15 | |
| 4 | 20 | |
| 5 | 25 | |
| 6 | 30 | |
| 7 | 35 | |
| 8 | 40 | |
| 9 | 45 | |
| 10 | 50 | |
| 11 | 55 | |
| 12 | 60 | |

Use the skeleton table to help.

| 5 times table | | |
|---------------|----|--|
| 1 | 5 | |
| 2 | 10 | |
| 3 | 15 | |
| 4 | 20 | |
| 5 | 25 | |
| 6 | 30 | |
| 7 | 35 | |
| 8 | 40 | |
| 9 | 45 | |
| 10 | 50 | |
| 11 | 55 | |
| 12 | 60 | |

| 5 times table | | |
|---------------|----|--|
| 1 | 5 | |
| 2 | 10 | |
| 3 | 15 | |
| 4 | 20 | |
| 5 | 25 | |
| 6 | 30 | |
| 7 | 35 | |

$31 \div 5 =$ Write down your 5 times table until you reach the number that is being divided.

The biggest multiple of 5 without going over 31 **is 30**. 6 x 5 = 30 But there is a remainder. 31 - 30 = 1There is 1 left over. So our answer is $31 \div 5 = 6 r1$ (remainder 1)

| 7 times table | | |
|---------------|----|--|
| 1 | 7 | |
| 2 | 14 | |
| 3 | 21 | |
| 4 | 28 | |
| 5 | 35 | |

31 ÷ 7 =

Write down your 7 times table until you get to the number that is being divided.

The biggest multiple of 7 without going over 31 **is 28**. $4 \ge 7 = 28$ But there are remainders. 31 - 28 = 3There are 3 left over. So our answer is $31 \div 7 = 4 r 3$ (remainder 3)

| 8 times table | | |
|---------------|----|--|
| 1 | 8 | |
| 2 | 16 | |
| 3 | 24 | |
| 4 | 32 | |
| 5 | 40 | |
| 6 | 48 | |
| 7 | 56 | |
| 8 | 64 | |
| 9 | 72 | |
| 10 | 80 | |
| 11 | 88 | |
| 12 | 96 | |

Try this:

37 ÷ 8 =

| 2 times table | | |
|---------------|----|--|
| 1 | 8 | |
| 2 | 16 | |
| 3 | 24 | |
| 4 | 32 | |
| 5 | 40 | |

Try this: $37 \div 8 =$ The biggest multiple of 8 without going over 37 **is 32**. 4 x 8 = 32 But there are remainders. 37 - 32 = 5There are 5 left over. So our answer is $37 \div 8 = 4 r5$ (remainder 5)

| 8 times table | | |
|---------------|----|--|
| 1 | 8 | |
| 2 | 16 | |
| 3 | 24 | |
| 4 | 32 | |
| 5 | 40 | |
| 6 | 48 | |
| 7 | 56 | |
| 8 | 64 | |
| 9 | 72 | |
| 10 | 80 | |
| 11 | 88 | |
| 12 | 96 | |

Try this: 50 ÷ 8 =

| 8 times table | | |
|---------------|----|--|
| 1 | 8 | |
| 2 | 16 | |
| 3 | 24 | |
| 4 | 32 | |
| 5 | 40 | |
| 6 | 48 | |
| 7 | 56 | |

Try this $50 \div 8 =$