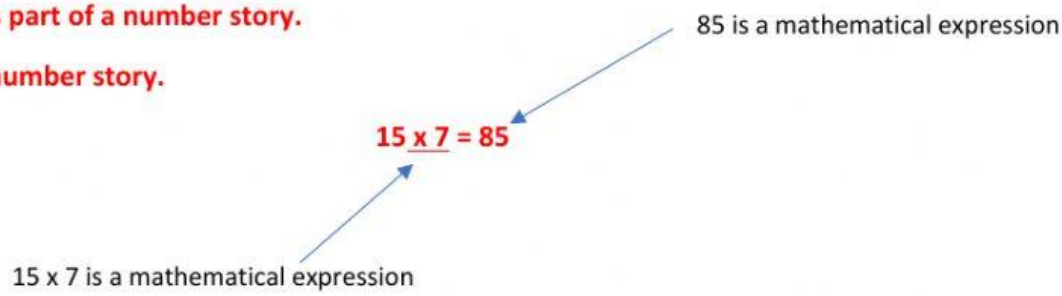
Problem Solving and Mathematical Language

Estimation

Guess Check and Adjust

An expression is part of a number story.

15 x 7 = 85 is a number story.



The **sum** of 8 and 7 is 15

8 + 7 = 15

To find the sum we add.

The **product** of 8 and 7 is 35

8 x 7 = 35

To find the quotient we multiply.

15 and 5 has a **difference of** 10

15 – 5 = 10

To find the difference we take.

We can also count on to find the difference.

5 + ___ = 15

5 + 10 = 15 so the difference of 15 and 5 is 10

The **quotient** of 15 and 5 is 3

15 ÷ 5 = 3

To find the quotient we divide.

Mark the correct answer with an x

What expression has a sum of 55?

5 x 11 50 + 5 60 – 5 110 ÷ 2

What expression has a product of 55?

5 x 11 50 + 5 60 – 5 110 ÷ 2

What expression has a difference of 55?

5 x 11 50 + 5 60 – 5 110 ÷ 2

What expression has a quotient of 55?

5 x 11 50 + 5 60 – 5 110 ÷ 2

What expression has a product of 80?

5 + 75 4 x 20 90 - 10 240 ÷ 4

What expression has a quotient of 10?

40 ÷ 10 8 x 5 40 ÷ 4 110 - 100

What expression has a difference of 30?

2 x 15 15 + 15 45 - 15 45 - 30

What expression has a sum of 55?

5 x 11 50 + 5 60 – 5 110 ÷ 2

What is the product of 3 and 6

What is the quotient of 12 and 3

What is the sum of 15 and 20

18 and 7 has a difference of

What is the product of 20 and 5

What is the quotient of 24 and 2

What is the sum of 17 and 21

18 and 21 has a difference of

LIVEWORKSHEETS

Which expression has a value between 900 and 1100

9 x10 1200 + 100 100 ÷ 10 850 + 100

Which expression has a value between 900 and 1100

9 x100 1300 - 100 100 x 20 850 - 100

Which expressions has a value between 400 and 500

9 x 50 1000 - 400 100 + 320 900 - 600

Which expressions has a value between 600 and 800

9 x 50 1300 - 600 1400 ÷ 2 750 + 100

For more complex expression we need to ESTIMATE and use a problem-solving strategy like LOGICAL THINKING

Which expression has a value between 1000 and 1500?

a/ 5 x 250 b/ 58 x 12 c/ 405 x 3 d/ 4805 ÷ 6

5 x 200 = 1000

5 x 300 = 1500

So

5 x 250 must between 1000 and 1500

58 x 10 = 580

60 x 12 = 720

So... 58 x 12 could not be between 1000 and 1500

405 + 405 + 405

810 + 405

1215

4800 ÷ 6

6 x 8 = 48

6 x 80 = 480

6 x 800 = 4800

4800 ÷ 6 = 800

Which expression has a value between 2000 and 2200?
Mark the correct answer with an x
Show your thinking in the boxes below.

a/ 14 x 56 b/ 750 x 3 c/ 1207÷6 d/ 4000 ÷ 10

Which expression has a value closest to 250?
Mark the correct answer with an x
Show your thinking in the boxes below.

a/ 14 x 18 b/ 55 x 4 c/ 500 ÷3 d/ 32 x 11

Which expression has a value closest to 400?
Mark the correct answer with an x
Show your thinking in the boxes below.

a/ 15 x 19 b/ c/ 55 x 6 c/ 1606 ÷ 4 d/ 1215 ÷ 4

LIVEWORKSHEETS

Solve by Estimating

James has 149 Pokemon cards. He has them in bags. There are between 28 and 32 cards in each bag.

How many bags of Pokemon cards does he have?

3 4 5

150 ÷ 3 = 50

160 ÷ 4 = 40

150 ÷ 5 = 30

Solve Using Guess Check and Adjust

James has 149 Pokemon cards. He has them in bags. There are between 28 and 32 cards in each bag.

How many bags of Pokemon cards does he have?

3	4	5
3 x 50 = 1	4 x 30 = 120	5 x 30 = 150
3 x 49 = 147	4 x 35 = 140	5 x 29 = 145
147 ÷ 3 = 49	4 x 36 = 144	29 and 30 are between 28 and 32 so he must have 5 bags
	4 x 37 = 148	

There are 121 chairs in the hall. They are arranged them in rows. There are between 28 and 32 chairs in each row.

Mark the correct answer with an x

How many rows of chairs must there be

3 4 5

Show your thinking.

James has 118 Pokemon cards. He has them in bags. There are between 25 and 30 cards in each bag.

Mark the correct answer with an x

How many bags of Pokemon cards does he have?

3 4 5

Show your thinking.

There are 207 children in a school. There are between 25 and 30 children in each class.

Mark the correct answer with an x

How many classes are there ?

5 6 7

Show your thinking.

LIVEWORKSHEETS