



THIRD SPACE
LEARNING

Arithmetic

Week 1

Day 1



Week 1 – Day 1

THIRD SPACE
LEARNING

$$A. 294 + 70 =$$

$$B. 4,697 + 2,534 =$$

$$C. 3 \times 8 =$$

$$D. 564 \times 8 =$$

$$E. 80 \times 5 =$$



**THIRD SPACE
LEARNING**

$$\text{F. } 7,609 + 385 =$$

$$\text{G. } 3898 - 455 =$$

$$\text{H. } 32 \times 56 =$$

$$\text{I. } 400 \times 13 =$$

Week 1 – Day 1

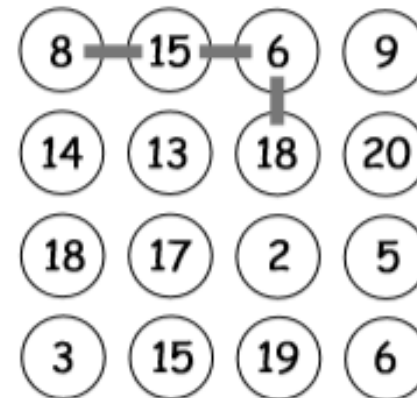
Joins

Join any four numbers.

Find their total.

Joins can go up, down or sideways, but not diagonally.

The score shown is $8 + 15 + 6 + 18 = 47$.



Find the highest possible score.

Find the lowest possible score.

Try joining five numbers.

Now try joining five numbers using only diagonal joins.



Week 1 - Day 1

THIRD SPACE
LEARNING

(ANSWERS)

- A) 364
- B) 7,231
- C) 24
- D) 4,512
- E) 400
- F) 7,994
- G) 4,353
- H) 1,792
- I) 5,200

Week 1 – Day 1 Answers

54 Joins

Using four numbers:

the highest score is $19 + 15 + 17 + 18 = 69$,

the lowest score is $6 + 5 + 2 + 17 = 30$.

Using five numbers:

the highest is $20 + 18 + 13 + 17 + 18 = 86$,

the lowest is $6 + 18 + 2 + 5 + 6 = 37$.

Using five numbers and diagonal joins:

the highest is $19 + 17 + 14 + 15 + 18 = 83$,

the lowest is $13 + 6 + 20 + 2 + 6 = 47$.



THIRD SPACE
LEARNING

Week 1

Day 2



Week 1 – Day 2

THIRD SPACE
LEARNING

$$A. 377 + 40 =$$

$$B. 80 \times 9 =$$

$$C. 8,327 + 14,895 =$$

$$D. \frac{1}{4} \text{ of } 36 =$$

$$E. 73,294 + 79,569 =$$



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$$\text{F. } 243 \div 9 =$$

$$\text{G. } 534,209 + 699 =$$

$$\text{H. } 8005 - 91 =$$

$$\text{I. } 37 \times 18 =$$

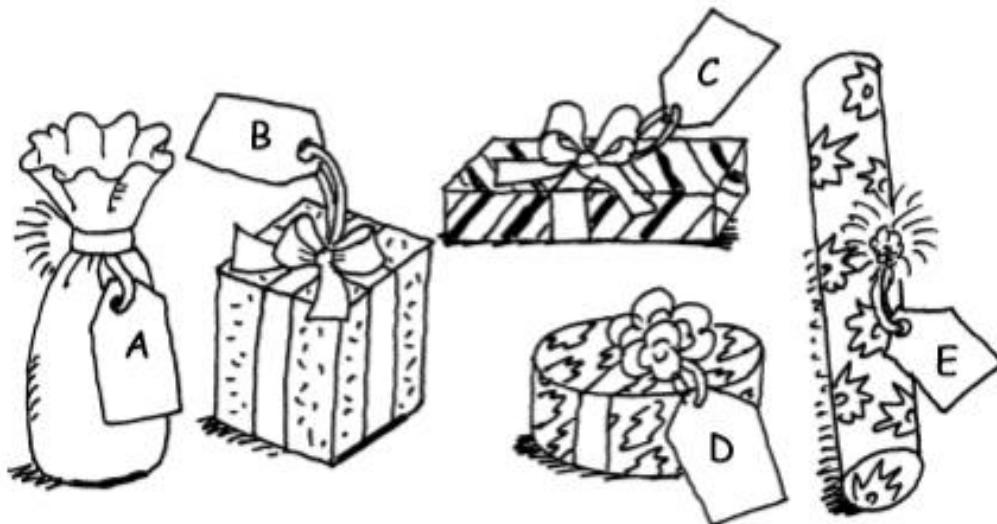


Week 1 – Day 2

THIRD SPACE
LEARNING

Presents

Gurmit paid £21 for five presents.



For A and B he paid a total of £6.

For B and C he paid a total of £10.

For C and D he paid a total of £7.

For D and E he paid a total of £9.

How much did Gurmit pay for each present?



Week 1 - Day 2

THIRD SPACE
LEARNING

(ANSWERS)

- A) 417
- B) 720
- C) 23,222
- D) 9
- E) 152,863
- F) 27
- G) 534,908
- H) 7914
- I) 666

57 Presents

Gurmit paid £2, £4, £6, £1 and £8 for the five presents.



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Week 1

Day 3



Week 1 – Day 3

THIRD SPACE
LEARNING

$$A. 867 + 300 =$$

$$B. 1,616 \div 8 =$$

$$C. \frac{1}{8} \text{ of } 32 =$$

$$D. 67 \times 8 =$$

$$E. 6.54 \times 10 =$$



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$$\mathbf{F. 34 \times 500 =}$$

$$\mathbf{G. 11,376 \div 18 =}$$

$$\mathbf{H. 46,923 - 598 =}$$

$$\mathbf{I. 0.86 + 3.2 =}$$

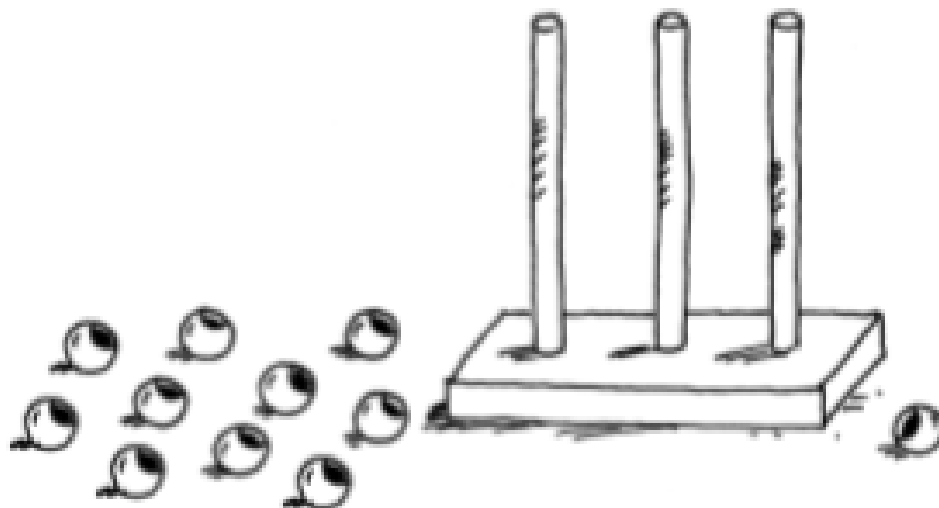
Week 1 – Day 3

Three digits

Imagine you have 25 beads.

You have to make a three-digit number on an abacus.

You must use all 25 beads for each number you make.



How many different three-digit numbers can you make?

Write them in order.



Week 1 - Day 3

THIRD SPACE
LEARNING

(ANSWERS)

- A) 1,167
- B) 202
- C) 4
- D) 536
- E) 65.4
- F) 17,000
- G) 632
- H) 46,325
- I) 4.06

Week 1 – Day 3 Answers

60 Three digits

You can make six different numbers.

In order, the numbers are:

799, 889, 898, 979, 988, 997.



THIRD SPACE
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Week 1

Day 4



THIRD SPACE
LEARNING

Year 6

Week 1 – Day 4

$$A. \frac{1}{3} \text{ of } 84 =$$

$$B. 7,684 \div 8 =$$

$$C. 8.761 \times 10 =$$

$$D. 206 \times 8 =$$

$$E. 600 + 573 =$$



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$$\mathbf{F. 0.34 \times 100 =}$$

$$\mathbf{G. 657 \div 10 =}$$

$$\mathbf{H. 57,999 - 301 =}$$

$$\mathbf{I. 4.67 - 1.03 =}$$

Make five numbers

Take ten cards numbered 0 to 9.



Each time use all ten cards.

Arrange the cards to make:

- five numbers that are multiples of 3
- five numbers that are multiples of 7
- five prime numbers

Make up more problems to use all ten cards to make five special numbers.



Week 1 - Day 4

THIRD SPACE
LEARNING

(ANSWERS)

- A) 28
- B) 960 r 4 OR 960.5
- C) 87.61
- D) 1,648
- E) 1,173
- F) 34
- G) 65.7
- H) 57,698
- I) 3.65

61 Make five numbers

For example:

a. 12, 39, 45, 60, 78.

b. 7, 42, 63, 98, 105.

c. 5, 23, 67, 89, 401.

There are other solutions.



THIRD SPACE
LEARNING

Week 1

Day 5



Week 1 – Day 5

THIRD SPACE
LEARNING

$$A. 10 \times 17.65 =$$

$$B. 947 \times 8 =$$

$$C. 974 + 70 =$$

$$D. 6,764 + 5,693 =$$

$$E. \frac{1}{12} \text{ of } 144 =$$



**THIRD SPACE
LEARNING**

$$\mathbf{F. 30,008 + 6784 =}$$

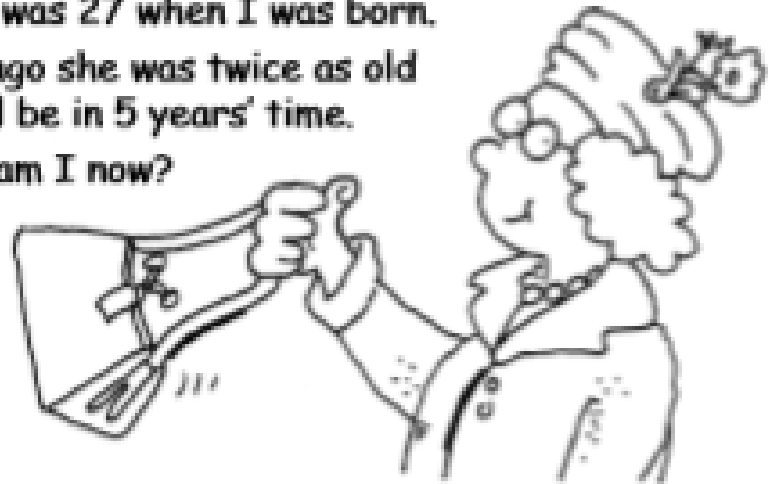
$$\mathbf{G. 782 \times 17 =}$$

$$\mathbf{H. 3,952 \div 16 =}$$

$$\mathbf{I. 9.04 \div 10}$$

Age old problems

1. My age this year is a multiple of 8.
Next year it will be a multiple of 7.
How old am I?
2. Last year my age was a square number.
Next year it will be a cube number.
How old am I?
How long must I wait until my age is both
a square number and a cube?
3. My Mum was 27 when I was born.
8 years ago she was twice as old
as I shall be in 5 years' time.
How old am I now?





Week 1 - Day 5

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(ANSWERS)

- A) 176.5
- B) 7,576
- C) 1,044
- D) 12,457
- E) 12
- F) 36,792
- G) 13,294
- H) 247
- I) 0.904

65 Age old problems

1. I am 48 years old (or possibly 104).
2. I am now 26 years old. In 38 years' time, when I am 64, my age will be both a square number and a cube.
3. I am 9 years old now.