The Mean

1a. Semaj knows that the mean of his cards is 7.
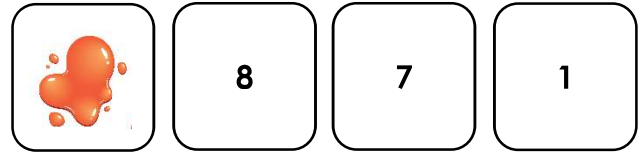
| 6 | | 4 | 9 |

He spilled paint on one of his cards. What is the missing number?

PS

The Mean

1b. Diana knows that the mean of her cards is 6.

| | 8 | 7 | 1 |

She spilled paint on one of his cards. What is the missing number?

PS

2a. Three friends are trying to work out their mean amount of pets. Sally has 7 more pets than Rylan. Rylan has 2 fewer pets than José who has 4.

What is their mean amount of pets?

PS

2b. Three friends are trying to work out their mean shoe size. Abdul is 2 sizes bigger than Luca. Luca is 1 size smaller than Jane who is size 6.

What is their mean shoe size?

PS

3a. Felicia has worked out the mean of four numbers: 9, 4, 6 and 5.

> To work out the mean, you must put the numbers in order first, before you divide by 4.

Do you agree with Felicia? Why?

R

3b. Howard has worked out the mean of five numbers: 9, 5, 6, 2 and 8.

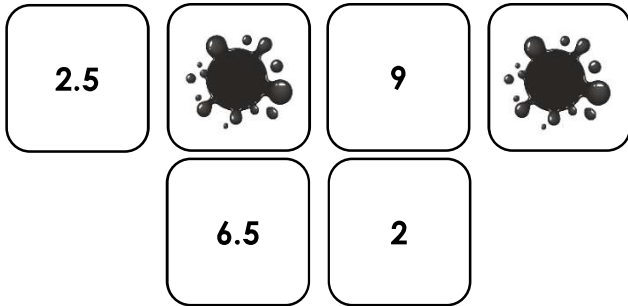> To find the mean of 5 numbers, the sum of the numbers must be a multiple of 5.

Do you agree with Howard? Why?

R

The Mean

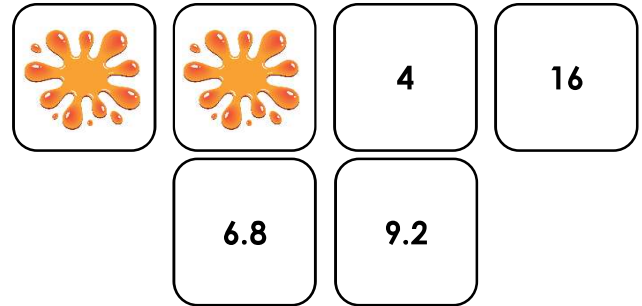**4a.** Lucie knows that the mean of her cards is 5.

| 2.5 | ⬛ | 9 | ⬛ |

| 6.5 | 2 |

She spilled paint on two of her cards. What could the missing numbers be?

The Mean

4b. Reese knows that the mean of his cards is 7.

| 🔶 | 🔶 | 4 | 16 |

| 6.8 | 9.2 |

He spilled paint on two of his cards. What could the missing numbers be?

5a. Four friends are trying to work out their mean height. Aisha is 3cm smaller than Zain. Zain is 7cm taller than Marie. Marie is 5cm smaller than Oliver. Oliver is 185cm tall.

What is their mean height?

5b. Four friends are trying to work out their mean age. Robert is 7 years older than Heath. Heath is 8 years younger than Brie. Brie is 3 years older than Beth. Beth is 28.

What is their mean age?

6a. Jack is calculating the mean of five numbers: 11, 18, 27, 4.5 and 14.5.

> Because two of the numbers are decimals, you only need to divide the total by 4.

Do you agree with Jack? Why?

6b. Elton is calculating the mean of six numbers: 15.2, 57, 51.8, 30, 2 and 6.
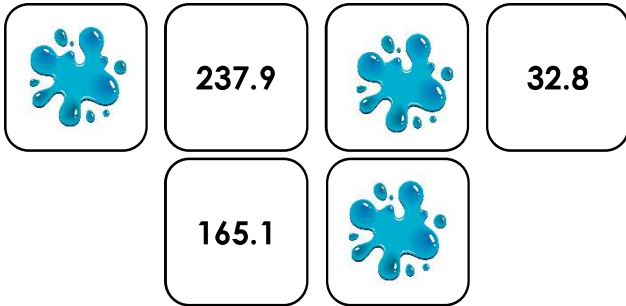
> The mean of these numbers is 162.

Do you agree with Elton? Why?

The Mean

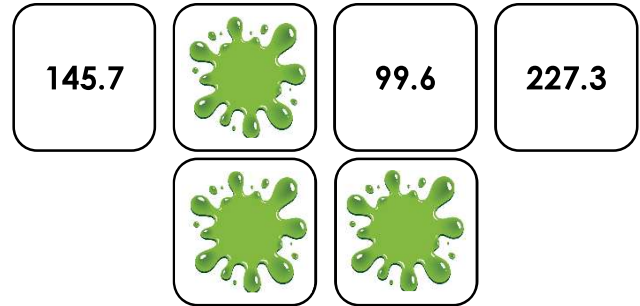**7a.** Caroline knows that the mean of her cards is 109.25

<image>	237.9	<image>	32.8
165.1	<image>		

She spilled paint on three of her cards. What could the missing numbers be?

GD

PS

The Mean

7b. Oliver knows that the mean of his cards is 145.8

145.7	<image>	99.6	227.3
<image>	<image>		

He spilled paint on three of his cards. What could the missing numbers be?

GD

PS

8a. Five friends are trying to find their mean weight. Sam is 3.5kg heavier than Colton. Colton is 5.2kg lighter than Bryce. Bryce is 1.4kg heavier than Jovan who is 75.8kg. Lewis is 5.8kg lighter than Jovan.

What is their mean weight?

GD

PS

8b. Five friends are trying to work out their mean height. Sarah is 32mm smaller than Bobby. Bobby is 7.6cm taller than Ellie. Ellie is 5.3cm smaller than Jordan. Jordan is 1.67m tall. Ethan is 52mm shorter than Jordan.

What is their mean height in cm?

GD

PS

9a. Darren says,

If you add decimal numbers together when calculating the mean, the answer will always be a decimal.

Do you agree with Darren? Why?

GD

R

9b. Nina says,

The mean will be the same if you divide each number individually first and then add them together instead of dividing at the end.

Do you agree with Nina? Why?

GD

R

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Reasoning and Problem Solving – The Mean – Year 6 Greater Depth