Discussion Problems
Step 9: Find Pairs of Values 1

National Curriculum Objectives:

Mathematics Year 6: (6A4) Find pairs of numbers that satisfy an equation with two unknowns

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More Year 6 Algebra resources.

Did you like this resource? Don't forget to review it on our website.

© Classroom Secrets Limited 2020

Find Pairs of Values 1

1. Use the different calculations to calculate the value of each letter.

a	b	c	d	v	w	x	y

$a \times c = x$	$c \div y = 6$	$-11 + x = 13$
$d - c = w$	$w - a = 9.5$	$30 \div w = 3$
$y + b = 24$	$b \times 4 = 64$	$v \times y = 12$

DP

2. Determine whether each child's statement about the equation below is true or false. All numbers are whole numbers.



Britney: c and e will always be larger than d.



Cori: d or e can be a negative number.



Jesse: c and e can have a difference of 1.

$$\frac{c}{d} < 0.7 > \frac{d}{e}$$

Investigate the possible values that could satisfy the equation.

DP

© Classroom Secrets Limited 2020

Find Pairs of Values 1

1. Use the different calculations to calculate the value of each letter.

a	b	c	d	v	w	x	y
0.5	16	48	58	1.5	10	24	8

$a \times c = x$	$c \div y = 6$	$-11 + x = 13$
$d - c = w$	$w - a = 9.5$	$30 \div w = 3$
$y + b = 24$	$b \times 4 = 64$	$v \times y = 12$

DP

2. Determine whether each child's statement about the equation below is true or false. All numbers are whole numbers.



Britney: c and e will always be larger than d. False



Cori: d or e can be a negative number. False



Jesse: c and e can have a difference of 1. False

$$\frac{c}{d} < 0.7 > \frac{d}{e}$$

Investigate the possible values that could satisfy the equation.

$c = 5$; $d = 8$; $e = 12$

DP

© Classroom Secrets Limited 2020