

Maths Mastery

Enumerate Possibilities of
Combinations of Two Variables



All the Values

1. In this equation, a and b are different whole numbers between 20 and 30.

Write all the calculations that show all the possible values of a and b in the equation:

$$a - b = 7$$

$$\begin{aligned} a &= 29, b = 22; \\ a &= 28, b = 21 \end{aligned}$$

If you finish:

- 💡 Check your answers with a partner.
- 💡 Discuss with your partner why 'a' could not be 25.
- 💡 Work with your partner to make some questions for other pairs.



b would have to be 18 which is less than 20

Hide
Answers

Possible Combinations

2. In each question, find all the possible combinations:

a. The total of 2 numbers is 17. The numbers are between 6 and 11.

$$7 + 10; 8 + 9$$

b. Two numbers added together make twenty-one. The numbers are eight or more.

$$8 + 13; 9 + 12; 10 + 11$$



If you finish:



Share your answers with a partner.



Write some questions for your partner.

Hide
Answers

Possible Combinations

3. In each question, find all the possible combinations:

c. The sum of two numbers is 35. Both numbers are less than twenty.

$$19 + 16; 18 + 17$$

d. The difference between two numbers is 9.
The sum of the numbers is between 34 and 40.

$$24 - 15; 23 - 14; 22 - 13$$

If you finish:



Share your answers with a partner.



Write some questions for your partner.



Hide
Answers

