Hunting for Averages

Solution Submission

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Hunting for Averages

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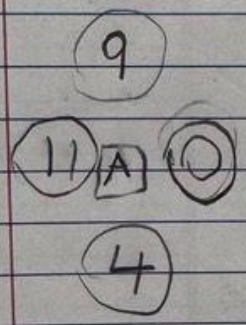


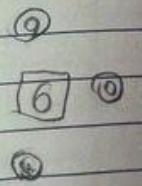
Sum of four numbers =

$9+11+0+4=24$

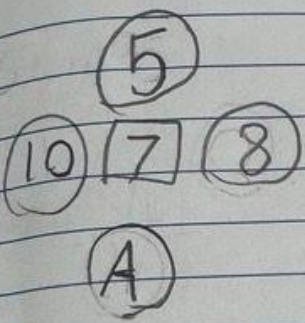
To find the average =

$24 \div 4 = 6$

solution = 6



9
11
4
0
24



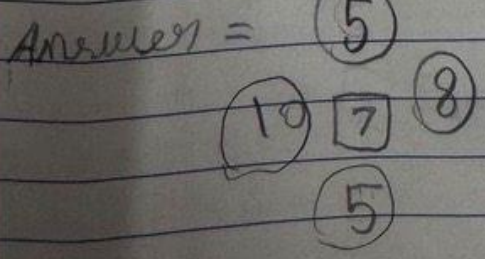
Take the middle number and multiply by four.
$4 \times 7 = 28$

the sum of the four numbers around the middle number has to be $= 4 \times$ middle number

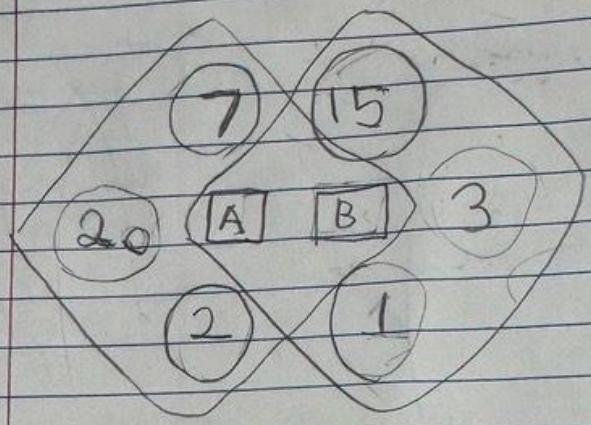
$10 + 5 + 8 + A = 4 \times 7 = 28$

$23 + A = 28$

$A = 5$

Answer = 

$4 \times 1 = 4$
$4 \times 2 = 8$
$4 \times 3 = 12$
$4 \times 4 = 16$
$4 \times 5 = 20$
$4 \times 6 = 24$
$4 \times 7 = 28$
$4 \times 8 = 32$



Split this problem into two single hunting average problems, like I have done.

step 1 Start with the highest combinations of numbers.

step 2 add the four numbers
$20+7+2+B$
$20+7+2+B = 29+B = 1$

step 3 Find the next biggest multiple of 4 from 29 it is 32.

step 4 $29+B=32$
$B \quad B=32-29$
$B=3$

step 5 Now A is the average of 20, 7, 2, 3

$$A = \frac{20+7+2+3}{4} = \frac{32}{4} = \frac{4 \times 8}{4} = 8$$

$A = 8$

step 6 Now check if A and B are correct.

$$\frac{A+15+3+1}{4} = B$$

$$\begin{array}{r} 15 \\ +\ 12 \\ \hline 27 \end{array}$$

$A = 8$
$B = 3$

step 7 $8+15+3+1 = 27$

27 is not a multiple of 4

step 8 go back to step 3 and find the next biggest multiple of 4 from 32

step 9 $29 + B = 36$
$B = 36 - 29$
$B = 7$

So $A = \frac{20+7+2+7}{4} = \frac{36}{4}$

$A = 9$

Now $\frac{A+15+3+1}{4} = B$

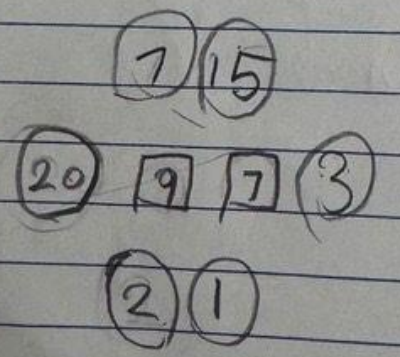
$A = 9$
$B = 7$

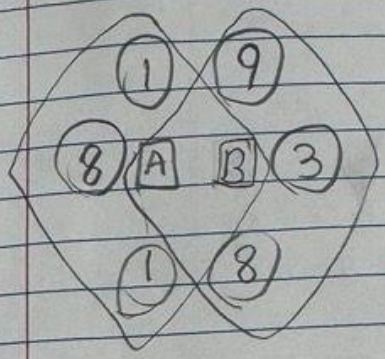
$\frac{9+15+3+1}{4} = \frac{28}{4} = 7 = B$

7 is the number that we got for B in step 9.

So A and B are correct
A = 9 and B = 7

Answer is





Use the same method as the previous problem

$8+1+B+1 = 10+B$

Next multiple of 4 from 10 is 12

$10+B = 12$

$B = 12-10$

$B = 2$

$$A = \frac{8+1+1+B}{4}$$

$$A = \frac{10+2}{4}$$

$$A = \frac{12}{4} = 3$$

Now $A = 3$

$B = 2$

Check if A and B are correct
A = 3
B = 2

A+9+3+8 = 3+9+3+8 = 23
23 is not a multiple of 4

we go to the next multiple of 4 which is 16

$10+B=16$

$B=16-10$

$B=6$

$A=\frac{8+1+1+B}{4}=\frac{10+6}{4}$

$A=\frac{16}{4}-4$

$A=4$

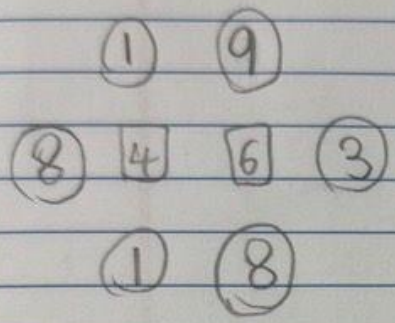
$B=6$

Check A and B

$B=\frac{A+9+3+8}{4}=\frac{4+20}{4}$

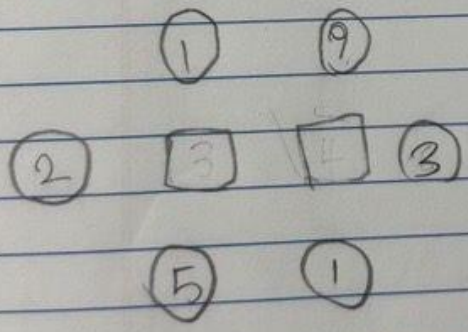
$B=\frac{24}{4}=6$

Answer is



Create a similar problem

problem



Answer: