



Learn a new puzzle

Hit the Target

Write + or - in each circle. The line must make the target.

Trick: Add them all, then fix**1**

$$5 \oplus 3 \oplus 2 = \boxed{6}$$

Add them all: $5 + 3 + 2 = 10$. That is 4 too many.

2

$$5 \oplus 3 \otimes 2 = \boxed{6}$$

Take away 2, not add it.
That makes $2 + 2 = 4$ less.

3

$$5 \oplus 3 \ominus 2 = \boxed{6}$$

$5 + 3 - 2 = 6$. It makes the target!

Try it

$$^a 1 \bigcirc 5 \bigcirc 1 = \boxed{5} \quad ^b 3 \bigcirc 5 \bigcirc 2 = \boxed{6}$$

$$^c 4 \bigcirc 1 \bigcirc 5 = \boxed{8} \quad ^d 1 \bigcirc 1 \bigcirc 4 = \boxed{4}$$

The answer is with
the other answers.

Talk about it: Ask: How much too big is the all-plus total?



① **Hit the Target** Write + or - in each circle to make the target.



$$^a \quad 6 \bigcirc 1 \bigcirc 3 = \boxed{4}$$

$$^b \quad 5 \bigcirc 1 \bigcirc 4 = \boxed{2}$$

$$^c \quad 1 \bigcirc 6 \bigcirc 1 = \boxed{8}$$

$$^d \quad 3 \bigcirc 1 \bigcirc 6 = \boxed{8}$$

② **Hit the Target** Write + or - in each circle to make the target.



$$^a \quad 2 \bigcirc 2 \bigcirc 5 = \boxed{9}$$

$$^b \quad 3 \bigcirc 5 \bigcirc 2 = \boxed{6}$$

$$^c \quad 4 \bigcirc 3 \bigcirc 1 = \boxed{6}$$

$$^d \quad 6 \bigcirc 2 \bigcirc 1 = \boxed{5}$$

③ **Hit the Target** Write + or - in each circle to make the target.



$$^a \quad 4 \bigcirc 2 \bigcirc 3 = \boxed{3}$$

$$^b \quad 2 \bigcirc 2 \bigcirc 3 = \boxed{3}$$

$$^c \quad 5 \bigcirc 2 \bigcirc 1 = \boxed{6}$$

$$^d \quad 4 \bigcirc 4 \bigcirc 2 = \boxed{2}$$

④ **Hit the Target** Write + or - in each circle to make the target.



$$^a \quad 2 \bigcirc 2 \bigcirc 3 = \boxed{1}$$

$$^b \quad 2 \bigcirc 1 \bigcirc 5 = \boxed{6}$$

$$^c \quad 7 \bigcirc 2 \bigcirc 1 = \boxed{4}$$

$$^d \quad 1 \bigcirc 1 \bigcirc 8 = \boxed{8}$$



5 Hit the Target Write + or - in each circle to make the target.



$$^a \quad 5 \bigcirc 2 \bigcirc 4 = \boxed{3}$$

$$^b \quad 4 \bigcirc 9 \bigcirc 2 = \boxed{11}$$

$$^c \quad 8 \bigcirc 9 \bigcirc 3 = \boxed{14}$$

$$^d \quad 4 \bigcirc 3 \bigcirc 5 = \boxed{12}$$

6 Hit the Target Write + or - in each circle to make the target.



$$^a \quad 9 \bigcirc 6 \bigcirc 3 = \boxed{18}$$

$$^b \quad 8 \bigcirc 9 \bigcirc 3 = \boxed{14}$$

$$^c \quad 5 \bigcirc 6 \bigcirc 8 = \boxed{3}$$

$$^d \quad 9 \bigcirc 8 \bigcirc 3 = \boxed{14}$$

7 Hit the Target Write + or - in each circle to make the target.



$$^a \quad 2 \bigcirc 7 \bigcirc 8 = \boxed{1}$$

$$^b \quad 3 \bigcirc 5 \bigcirc 9 = \boxed{17}$$

$$^c \quad 7 \bigcirc 2 \bigcirc 4 = \boxed{1}$$

$$^d \quad 7 \bigcirc 8 \bigcirc 3 = \boxed{12}$$

8 Hit the Target Write + or - in each circle to make the target.



$$^a \quad 3 \bigcirc 1 \bigcirc 4 \bigcirc 6 = \boxed{6}$$

$$^b \quad 2 \bigcirc 8 \bigcirc 6 \bigcirc 2 = \boxed{6}$$

$$^c \quad 1 \bigcirc 6 \bigcirc 6 \bigcirc 1 = \boxed{12}$$

$$^d \quad 2 \bigcirc 2 \bigcirc 1 \bigcirc 5 = \boxed{8}$$

**9 Hit the Target** Write + or – in each circle to make the target.

^a $1 \bigcirc 4 \bigcirc 4 \bigcirc 3 = \boxed{12}$

^b $5 \bigcirc 5 \bigcirc 7 \bigcirc 3 = \boxed{10}$

^c $9 \bigcirc 4 \bigcirc 2 \bigcirc 5 = \boxed{2}$

^d $4 \bigcirc 3 \bigcirc 6 \bigcirc 4 = \boxed{9}$

10 Hit the Target Write + or – in each circle to make the target.

^a $17 \bigcirc 66 \bigcirc 13 = \boxed{70}$

^b $45 \bigcirc 25 \bigcirc 24 = \boxed{46}$

^c $35 \bigcirc 15 \bigcirc 40 = \boxed{10}$

^d $30 \bigcirc 24 \bigcirc 14 = \boxed{20}$



Answers

 For grown-ups. Cut off or keep this page aside until the puzzles are done.

Learn · Hit the Target

$$^a 1 \oplus 5 \ominus 1 = \boxed{5} \quad ^b 3 \oplus 5 \ominus 2 = \boxed{6}$$

$$^c 4 \ominus 1 \oplus 5 = \boxed{8} \quad ^d 1 \ominus 1 \oplus 4 = \boxed{4}$$

#1

$$^a 6 \oplus 1 \ominus 3 = \boxed{4} \quad ^b 5 \oplus 1 \ominus 4 = \boxed{2}$$

$$^c 1 \oplus 6 \oplus 1 = \boxed{8} \quad ^d 3 \ominus 1 \oplus 6 = \boxed{8}$$

a: All + makes 10, which is 6 too many. $3 + 3 = 6$, so $6 + 1 - 3 = 4$. b: All + makes 10, which is 8 too many. $4 + 4 = 8$, so $5 + 1 - 4 = 2$. c: $1 + 6 + 1 = 8$. All + works. d: All + makes 10, which is 2 too many. $1 + 1 = 2$, so $3 - 1 + 6 = 8$.

#2

$$^a 2 \oplus 2 \oplus 5 = \boxed{9} \quad ^b 3 \oplus 5 \ominus 2 = \boxed{6}$$

$$^c 4 \oplus 3 \ominus 1 = \boxed{6} \quad ^d 6 \ominus 2 \oplus 1 = \boxed{5}$$

a: $2 + 2 + 5 = 9$. All + works. b: All + makes 10, which is 4 too many. $2 + 2 = 4$, so $3 + 5 - 2 = 6$. c: All + makes 8, which is 2 too many. $1 + 1 = 2$, so $4 + 3 - 1 = 6$. d: All + makes 9, which is 4 too many. $2 + 2 = 4$, so $6 - 2 + 1 = 5$.

#3

$$^a 4 \oplus 2 \ominus 3 = \boxed{3} \quad ^b 2 \ominus 2 \oplus 3 = \boxed{3}$$

$$^c 5 \oplus 2 \ominus 1 = \boxed{6} \quad ^d 4 \ominus 4 \oplus 2 = \boxed{2}$$

a: All + makes 9, which is 6 too many. $3 + 3 = 6$, so $4 + 2 - 3 = 3$. b: All + makes 7, which is 4 too many. $2 + 2 = 4$, so $2 - 2 + 3 = 3$. c: All + makes 8, which is 2 too many. $1 + 1 = 2$, so $5 + 2 - 1 = 6$. d: All + makes 10, which is 8 too many. $4 + 4 = 8$, so $4 - 4 + 2 = 2$.

#4

$$^a 2 \oplus 2 \ominus 3 = \boxed{1} \quad ^b 2 \ominus 1 \oplus 5 = \boxed{6}$$

$$^c 7 \ominus 2 \ominus 1 = \boxed{4} \quad ^d 1 \ominus 1 \oplus 8 = \boxed{8}$$

a: All + makes 7, which is 6 too many. $3 + 3 = 6$, so $2 + 2 - 3 = 1$. b: All + makes 8, which is 2 too many. $1 + 1 = 2$, so $2 - 1 + 5 = 6$. c: All + makes 10, which is 6 too many. $2 + 1 = 3$ and $3 + 3 = 6$, so $7 - 2 - 1 = 4$. d: All + makes 10, which is 2 too many. $1 + 1 = 2$, so $1 - 1 + 8 = 8$.

#5

$$^a 5 \oplus 2 \ominus 4 = \boxed{3} \quad ^b 4 \oplus 9 \ominus 2 = \boxed{11}$$

$$^c 8 \oplus 9 \ominus 3 = \boxed{14} \quad ^d 4 \oplus 3 \oplus 5 = \boxed{12}$$

a: All + makes 11, which is 8 too many. $4 + 4 = 8$, so $5 + 2 - 4 = 3$. b: All + makes 15, which is 4 too many. $2 + 2 = 4$, so $4 + 9 - 2 = 11$. c: All + makes 20, which is 6 too many. $3 + 3 = 6$, so $8 + 9 - 3 = 14$. d: $4 + 3 + 5 = 12$. All + works.

#6

$$^a 9 \oplus 6 \oplus 3 = \boxed{18} \quad ^b 8 \oplus 9 \ominus 3 = \boxed{14}$$

$$^c 5 \oplus 6 \ominus 8 = \boxed{3} \quad ^d 9 \oplus 8 \ominus 3 = \boxed{14}$$

a: $9 + 6 + 3 = 18$. All + works. b: All + makes 20, which is 6 too many. $3 + 3 = 6$, so $8 + 9 - 3 = 14$. c: All + makes 19, which is 16 too many. $8 + 8 = 16$, so $5 + 6 - 8 = 3$. d: All + makes 20, which is 6 too many. $3 + 3 = 6$, so $9 + 8 - 3 = 14$.

#7

$$^a 2 \oplus 7 \ominus 8 = \boxed{1} \quad ^b 3 \oplus 5 \oplus 9 = \boxed{17}$$

$$^c 7 \ominus 2 \ominus 4 = \boxed{1} \quad ^d 7 \oplus 8 \ominus 3 = \boxed{12}$$

a: All + makes 17, which is 16 too many. $8 + 8 = 16$, so $2 + 7 - 8 = 1$. b: $3 + 5 + 9 = 17$. All + works. c: All + makes 13, which is 12 too many. $2 + 4 = 6$ and $6 + 6 = 12$, so $7 - 2 - 4 = 1$. d: All + makes 18, which is 6 too many. $3 + 3 = 6$, so $7 + 8 - 3 = 12$.

#8

$$^a 3 \oplus 1 \ominus 4 \oplus 6 = \boxed{6} \quad ^b 2 \oplus 8 \ominus 6 \oplus 2 = \boxed{6}$$

$$^c 1 \oplus 6 \oplus 6 \ominus 1 = \boxed{12} \quad ^d 2 \oplus 2 \ominus 1 \oplus 5 = \boxed{8}$$

a: All + makes 14, which is 8 too many. $4 + 4 = 8$, so $3 + 1 - 4 + 6 = 6$. b: All + makes 18, which is 12 too many. $6 + 6 = 12$, so $2 + 8 - 6 + 2 = 6$. c: All + makes 14, which is 2 too many. $1 + 1 = 2$, so $1 + 6 + 6 - 1 = 12$. d: All + makes 10, which is 2 too many. $1 + 1 = 2$, so $2 + 2 - 1 + 5 = 8$.



Answers

 For grown-ups. Cut off or keep this page aside until the puzzles are done.**#9**

$$^a 1 \oplus 4 \oplus 4 \ominus 3 = \boxed{12} \quad ^b 5 \ominus 5 \oplus 7 \ominus 3 = \boxed{10}$$

$$^c 9 \ominus 4 \oplus 2 \ominus 5 = \boxed{2} \quad ^d 4 \oplus 3 \oplus 6 \ominus 4 = \boxed{9}$$

a: $1 + 4 + 4 + 3 = 12$. All $+$ works. b: All $+$ makes 20, which is 10 too many. $5 + 5 = 10$, so $5 - 5 + 7 + 3 = 10$. c: All $+$ makes 20, which is 18 too many. $4 + 5 = 9$ and $9 + 9 = 18$, so $9 - 4 + 2 - 5 = 2$. d: All $+$ makes 17, which is 8 too many. $4 + 4 = 8$, so $4 + 3 + 6 - 4 = 9$.

#10

$$^a 17 \oplus 66 \ominus 13 = \boxed{70} \quad ^b 45 \oplus 25 \ominus 24 = \boxed{46}$$

$$^c 35 \oplus 15 \ominus 40 = \boxed{10} \quad ^d 30 \ominus 24 \oplus 14 = \boxed{20}$$

a: All $+$ makes 96, which is 26 too many. $13 + 13 = 26$, so $17 + 66 - 13 = 70$. b: All $+$ makes 94, which is 48 too many. $24 + 24 = 48$, so $45 + 25 - 24 = 46$. c: All $+$ makes 90, which is 80 too many. $40 + 40 = 80$, so $35 + 15 - 40 = 10$. d: All $+$ makes 68, which is 48 too many. $24 + 24 = 48$, so $30 - 24 + 14 = 20$.