

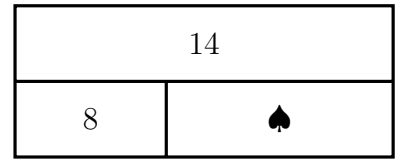
1. Use the block diagram to complete

(i) these 3 solve equations:

$$\dots - \spadesuit = \dots$$

$$\dots + \spadesuit = \dots$$

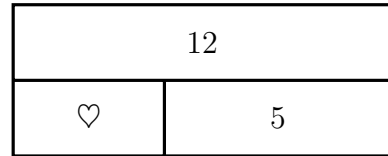
$$\spadesuit + \dots = \dots$$



(ii) $\spadesuit = \dots - \dots = \dots$

2. (a) Solve $12 - \heartsuit = 5$

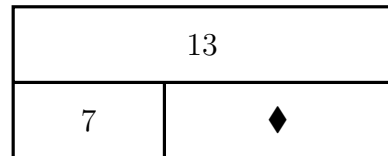
You may use this block diagram if it helps you.



$$\heartsuit = \dots\dots\dots$$

(b) Solve $7 + \blacklozenge = 13$

You may use this block diagram if it helps you.



$$\blacklozenge = \dots\dots\dots$$

3. (a) Solve $9 + \heartsuit = 16$

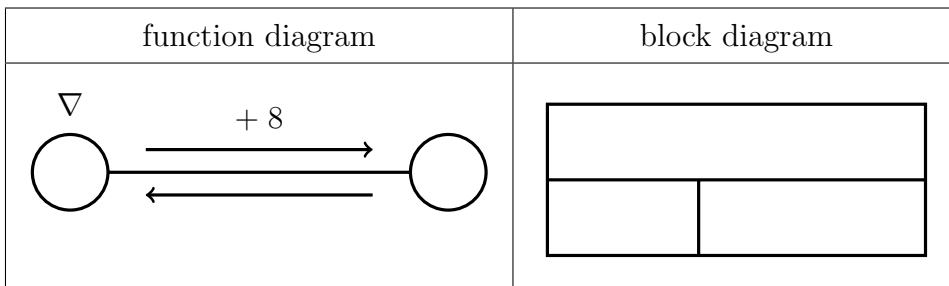
$$\heartsuit = \dots\dots\dots$$

(b) Solve $14 - \blacklozenge = 6$

$$\blacklozenge = \dots\dots\dots$$

4. Complete the **function** diagram to solve $\nabla + 8 = 13$

You may use the block diagram if it helps you.



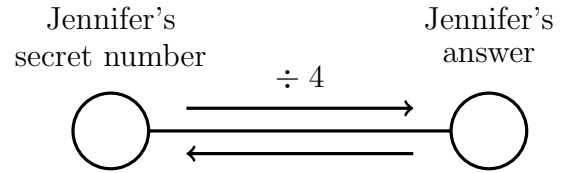
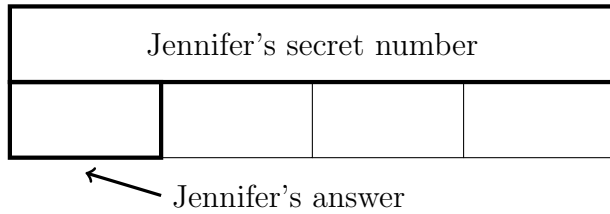
$$\nabla = \dots\dots\dots$$

5. Jennifer is thinking of a secret number.

She divides her secret number by 4 and gets the answer 3.

Write down Jennifer's secret number.

You may use the boxes diagram or the function diagram if they help you.



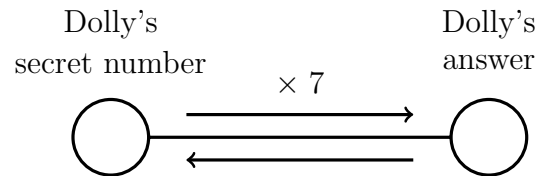
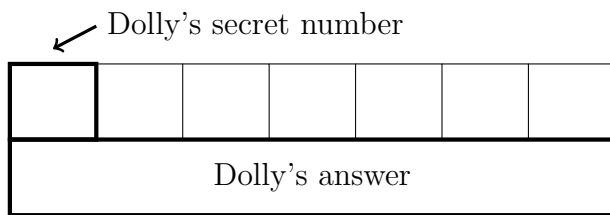
5.

6. Dolly is thinking of a secret number.

She multiplies her secret number by 7 and gets the answer 21

Write down Dolly's secret number.

You may use the boxes diagram or the function diagram if they help you.



6.

7. (a) Honey is thinking of a secret number.

She divides her secret number by 2 and gets the answer 6

Write down Honey's secret number.

(a)

(b) Igor is thinking of a secret number.

He multiplies his secret number by 2 and gets the answer 6

Write down Igor's secret number.

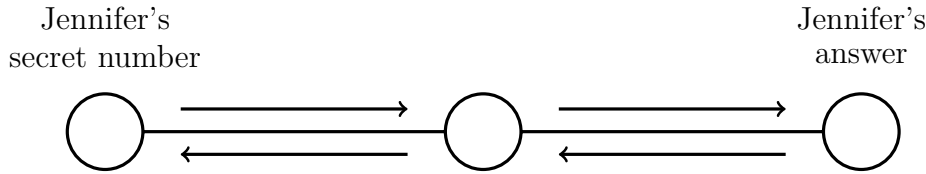
(b)

8. Jennifer is thinking of a secret number.

She multiplies her secret number by 2, subtracts 6 and gets the answer 14

Write down Jennifer's secret number.

You may complete the function diagram if it helps you.



8.

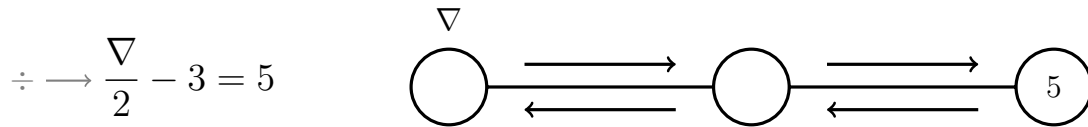
9. Sean is thinking of a secret number.

He multiplies his secret number by 3, adds 18 and gets the answer 30

Write down Sean's secret number.

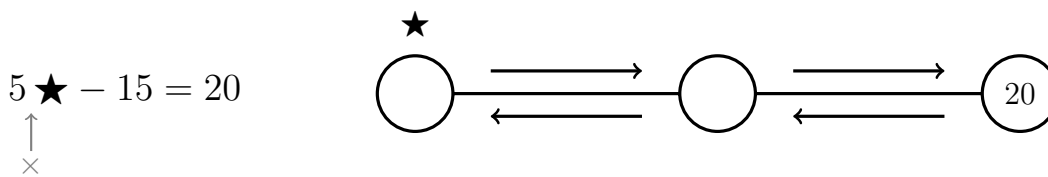
9.

10. (a) Complete the function diagram to solve



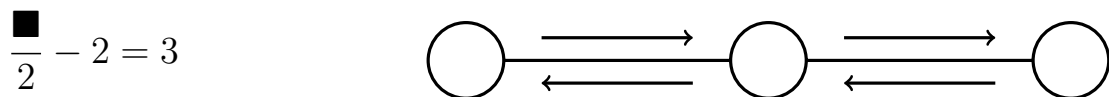
$\nabla = \dots\dots\dots$

(b) Complete the function diagram to solve



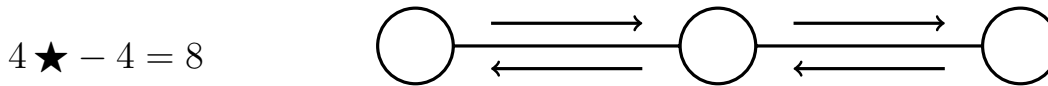
$\star = \dots\dots\dots$

11. (a) Complete the function diagram to solve



$\blacksquare = \dots\dots\dots$

(b) Complete the function diagram to solve



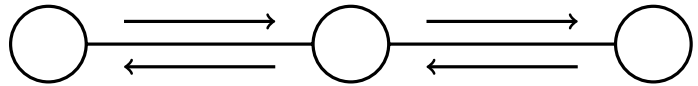
$\star = \dots\dots\dots$

12. (a) Complete the function diagram to solve

1st sign because it's inside the bracket

$$2(\spadesuit - 3) = 14$$

\downarrow
 \uparrow
 \times

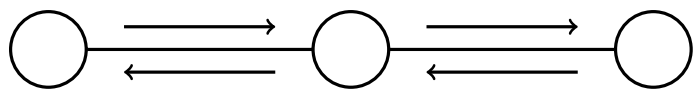


$\spadesuit = \dots\dots\dots$

(b) Complete the function diagram to solve

1st sign because the $\frac{\text{long } \div \text{ sign}}{\square}$ acts $\frac{(\text{like a bracket})}{\square}$

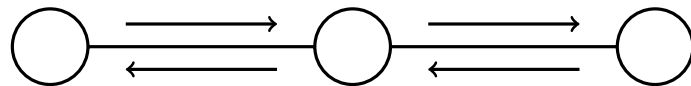
$$\text{long } \div \text{ sign} \rightarrow \frac{\diamond - 3}{5} = 3$$



$\diamond = \dots\dots\dots$

13. (a) Complete the function diagram to solve

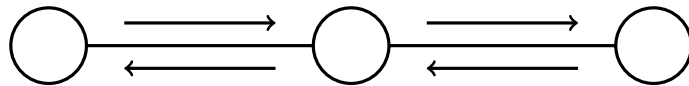
$$2(\heartsuit + 3) = 16$$



$\heartsuit = \dots\dots\dots$

(b) Complete the function diagram to solve

$$\frac{\circledast + 12}{4} = 5$$



$\circledast = \dots\dots\dots$

14. (a) Solve

$$\frac{\clubsuit}{7} + 19 = 21$$

$\clubsuit = \dots\dots\dots$

(b) Solve

$$6(\star - 5) = 24$$

$\star = \dots\dots\dots$