Start with 0 .
Find a route from 'start' to 'end' that totals exactly 100


Which route has the highest total?
Which route has the lowest total?


Zods have 9 spots.

Zids have 4 spots.
Altogether some Zids and Zods have 48 spots. How many Zids are there?

Think about how you could solve this problem. Are you going to use jottings? Are you going to draw diagrams? Are you going to use calculations? Are you going to put
 your ideas into a table?

What do we know?

What do we want to find out?

4 - Zids
9 - Zods
48 = ?

$9+9+9+9+9+9=54 X$
$9+9+9+9+9+4=49 X$
$9+9+9+9+4+4=$
$9 \times 6=$
$9 \times 5=$
$9 \times 4=$
$4+4+4+4+4+4+4+4+4+4+4+4=$
$4 \times 12=$

| Zids | Spots | Zods | Spots |
| :--- | :--- | :--- | :--- |
| 1 | 4 | 1 | 9 |
| 2 | 8 | 2 | 18 |
| 3 | 12 | 3 | 27 |



Choose the method that works for you. Can you find more than one solution?

What if Zids have 5 spots, Zods have 7 spots, and there are 140 spots altogether?

Find as many solutions as you can. This could be only Zids; only Zods; and a combinations of them both. Are you going to solve this problem in the same way as Q1 or is there a better method?
Please share your working out with me.

