

## Rows of coins



1. Take five coins: 1p, 2p, 5p, 10p, 20p.  
Put them in a row using these clues.  
The total of the first three coins is 27p.  
The total of the last three coins is 31p.  
The last coin is double the value of the first coin.
2. Take six coins: two 1p, two 2p and two 5p.  
Put them in a row using these clues.  
Between the two 1p coins there is one coin.  
Between the two 2p coins there are two coins.  
Between the two 5p coins there are three coins.  
  
What if you take two 10p coins as well, and between them are four coins?

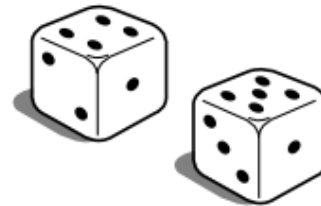
## Roly poly

The dots on opposite faces of a dice add up to 7.

1. Imagine rolling one dice.  
The score is the total number of dots you can see.  
You score 17.  
Which number is face down?  
How did you work out your answer?



2. Imagine rolling two dice.  
The dice do not touch each other.



The score is the total number of dots you can see.  
Which numbers are face down to score 30?

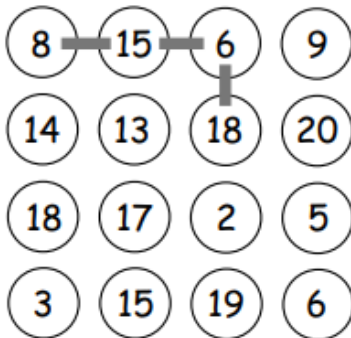
## Joins

Join any four numbers.

Find their total.

Joins can go up, down or sideways, but not diagonally.

The score shown is  $8 + 15 + 6 + 18 = 47$ .



Find the highest possible score.

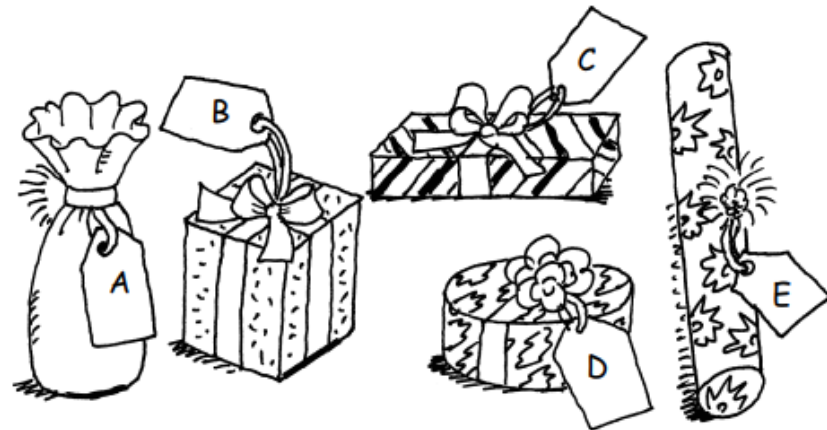
Find the lowest possible score.

Try joining five numbers.

Now try joining five numbers using only diagonal joins.

## Presents

Gurmit paid £21 for five presents.



For A and B he paid a total of £6.

For B and C he paid a total of £10.

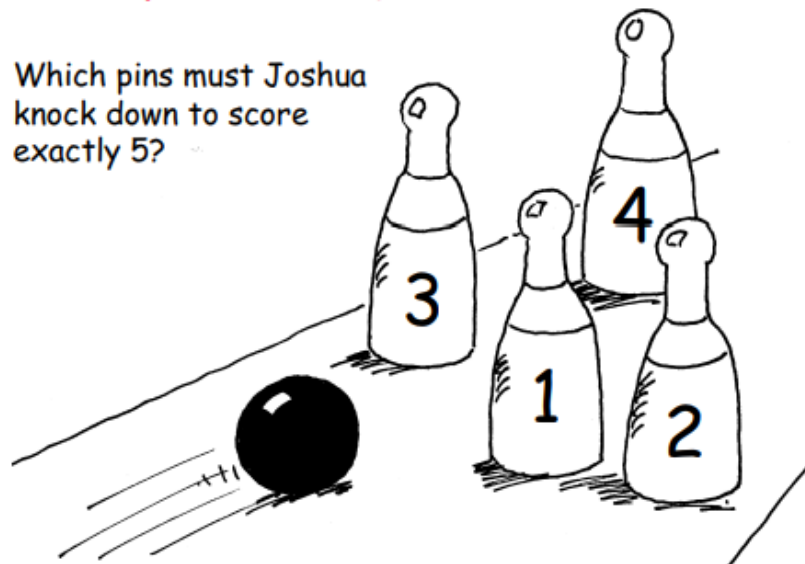
For C and D he paid a total of £7.

For D and E he paid a total of £9.

How much did Gurmit pay for each present?

## Four-pin bowling

Which pins must Joshua knock down to score exactly 5?

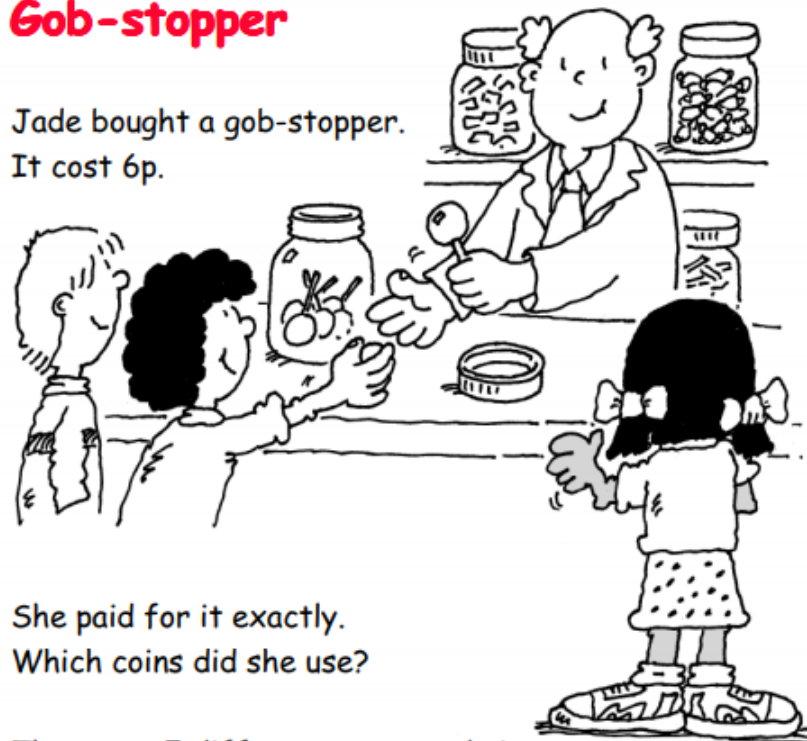


Find 2 different ways:

- to score 5
- to score 6
- to score 7

## Gob-stopper

Jade bought a gob-stopper.  
It cost 6p.



She paid for it exactly.  
Which coins did she use?

There are 5 different ways to do it.  
Find as many as you can.

What if the gob-stopper cost 7p?

