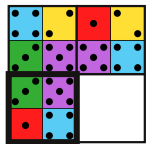


# MATCH POINT

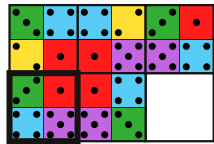
## Éléments de solution

### Disposer

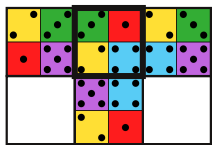
Du fait de la forte contrainte imposée, une seule pièce à employer, les **solutions sont ici uniques**.



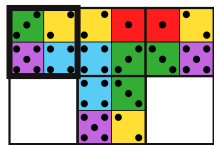
$$2 \times 3 + 3 \times 5 \\ = 6 + 15 \\ = 21 \text{ points}$$



$$4 \times 1 + 2 \times 5 \\ = 8 + 10 \\ = 18 \text{ points}$$



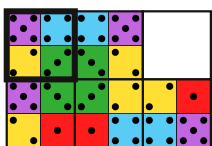
$$2 \times 3 + 3 \times 4 \\ = 6 + 12 \\ = 18 \text{ points}$$



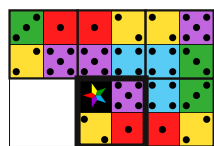
$$2 \times 2 + 3 \times 4 \\ = 4 + 12 \\ = 16 \text{ points}$$

### Installer

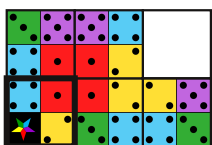
Du fait de la forte contrainte imposée, une seule pièce à employer, les **solutions sont ici uniques**.



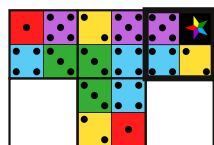
$$4 \times 3 + 2 \times 4 + 10 \\ = 12 + 8 + 10 \\ = 30 \text{ points}$$



$$2 \times 1 + 4 \times 5 \\ = 2 + 20 \\ = 18 \text{ points}$$




$$4 \times 1 + 3 \times 4 + 10 \\ = 4 + 12 + 10 \\ = 26 \text{ points}$$





$$3 \times 4 + 2 \times 5 \\ = 12 + 10 \\ = 22 \text{ points}$$


### Positionner


En cas de **solutions multiples**, celles-ci sont fournies de **manière exhaustive**.


**E**   $2 \times 1 = 2 \text{ points}$

**B**   $4 \times 2 = 8 \text{ points}$


**D**   $3 \times 3 = 9 \text{ points}$

**B**   $2 \times 5 = 10 \text{ points}$


**D**   $4 \times 1 = 4 \text{ points}$


**A**   $4 \times 1 + 2 \times 5 = 14 \text{ points}$


**C**   $31 \text{ points}$


**A**   $3 \times 3 = 9 \text{ points}$

**D**   $4 \times 2 = 8 \text{ points}$

**E**   $3 \times 1 + 3 \times 3 = 12 \text{ points}$

**F**   $3 \times 1 + 2 \times 5 = 13 \text{ points}$

**B**   $4 \times 4 = 16 \text{ points}$

**B**   $3 \times 3 + 2 \times 5 = 19 \text{ points}$

**C**   $34 \text{ points}$

### Situer

De par la **non unicité des solutions**, une seule est donnée ici en exemple pour chaque situation.

**A**   $3 \times 2 = 6 \text{ points}$

**B**   $4 \times 2 = 8 \text{ points}$


**D**   $28 \text{ points}$

**E**   $32 \text{ points}$

**C**   $5 \times 5 + 10 = 35 \text{ points}$

**C**   $62 \text{ points}$

**A**   $3 \times 2 = 6 \text{ points}$

**C**   $2 \times 5 = 10 \text{ points}$

**A**   $14 \text{ points}$

**B**   $20 \text{ points}$

**D**   $27 \text{ points}$


**B**   $32 \text{ points}$


# MATCH POINT


## Éléments de solution


### Sélectionner


Les **solutions** ne sont **pas uniques**, en conséquence, une seule est donnée ici en exemple.


A   $2 \times 2$   
= 4 points


C   $2 \times 1 + 3 \times 2$   
= 8 points


A   $3 \times 4$   
= 12 points

A   $2 \times 2 + 3 \times 4$   
= 16 points

G   $2 \times 3$   
= 6 points


E   $2 \times 5$   
= 10 points


G   $2 \times 3 + 2 \times 4$   
= 14 points


B   $3 \times 2 + 3 \times 4$   
= 18 points


### Préférer


Les **solutions** ne sont, encore une fois, **pas uniques**, un seul exemple n'est donc fourni.


A   $3 \times 1$   
= 3 points


C   $3 \times 3$   
= 9 points


B   $3 \times 1 + 2 \times 5$   
= 13 points

C   $2 \times 1 + 3 \times 5$   
= 17 points

A   $3 \times 1 + 2 \times 2$   
= 7 points

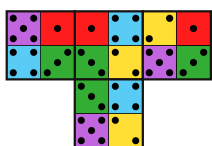
C   $2 \times 1 + 3 \times 3$   
= 11 points

D   $3 \times 5$   
= 15 points

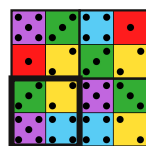
C   $3 \times 3 + 2 \times 5$   
= 19 points

### Cibler

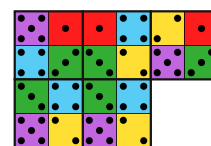
Bien qu'un certain choix soit laissé dans la pièce à employer, les **solutions** sont ici **uniques**.



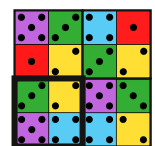
$2 \times 1 + 3 \times 3$   
= 2 + 9  
= 11 points



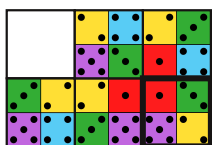
$2 \times 2 + 2 \times 4$   
= 4 + 8  
= 12 points



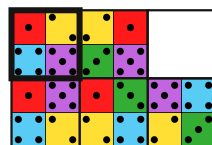
$2 \times 1 + 3 \times 3$   
= 2 + 9  
= 11 points



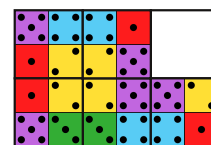
$2 \times 2 + 2 \times 4$   
= 4 + 8  
= 12 points



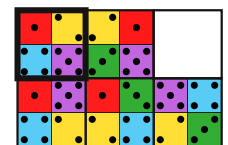
$3 \times 1 + 2 \times 5$   
= 3 + 10  
= 13 points



$2 \times 2 + 2 \times 5$   
= 4 + 10  
= 14 points



$3 \times 1 + 2 \times 5$   
= 3 + 10  
= 13 points



$2 \times 2 + 2 \times 5$   
= 4 + 10  
= 14 points

### Décimer

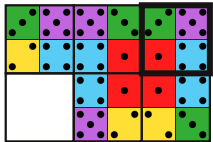
De nouveau, bien qu'un certain choix soit laissé dans la pièce à employer, les **solutions** sont ici **uniques** au placement près de la pièce utilisée dans la première situation.

# MATCH POINT

## Éléments de solution

### Distribuer

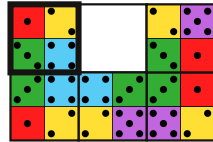
Pour que le score visé de 18 points soit obtenu simultanément dans les quatre configurations, la **solution** est **unique**.



$$4 \times 1 + 2 \times 3 + 2 \times 4$$

$$= 4 + 6 + 8$$

$$= 18 \text{ points}$$



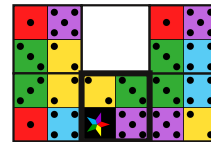
$$2 \times 3 + 3 \times 4$$

$$= 6 + 12$$

$$= 18 \text{ points}$$

### Ventiler

Ici aussi, pour que le score visé de 33 points soit obtenu simultanément dans les quatre configurations, la **solution** est **unique**.

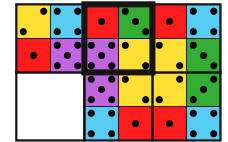


$$3 \times 2 + 3 \times 3 + 2 \times 4$$

$$+ 2 \times 5$$

$$= 6 + 9 + 8 + 10$$

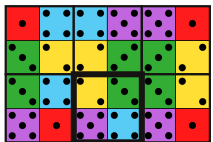
$$= 33 \text{ points}$$



$$4 \times 2 + 3 \times 5 + 10$$

$$= 8 + 15 + 10$$

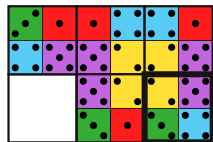
$$= 33 \text{ points}$$



$$3 \times 2 + 4 \times 3$$

$$= 6 + 12$$

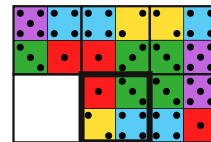
$$= 18 \text{ points}$$



$$4 \times 2 + 2 \times 5$$

$$= 8 + 10$$

$$= 18 \text{ points}$$

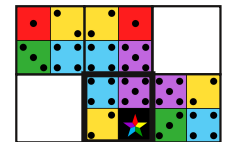


$$3 \times 1 + 4 \times 3 + 2 \times 4$$

$$+ 10$$

$$= 3 + 12 + 8 + 10$$

$$= 33 \text{ points}$$



$$2 \times 3 + 3 \times 4 + 3 \times 5$$

$$= 6 + 12 + 15$$

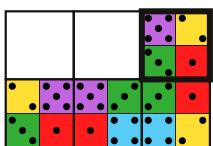
$$= 33 \text{ points}$$

### Viser

Attention, désormais, ce sont les **scores totaux** qui sont considérés. Toutefois, les **solutions** sont toujours **uniques**.

### Employer

Encore ici, **scores totaux** et **solutions uniques**.

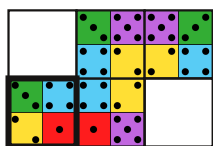


$$4 \times 1 + 3 \times 3 + 2 \times 4$$

$$+ 2 \times 5$$

$$= 4 + 9 + 8 + 10$$

$$= 31 \text{ points}$$

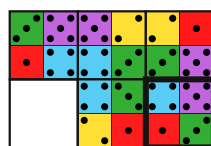


$$2 \times 1 + 3 \times 2 + 3 \times 4$$

$$+ 2 \times 5$$

$$= 2 + 6 + 12 + 10$$

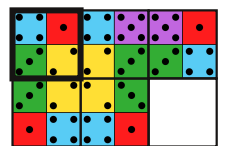
$$= 30 \text{ points}$$



$$2 \times 1 + 2 \times 2 + 3 \times 3$$

$$+ 3 \times 4 + 4 \times 5$$

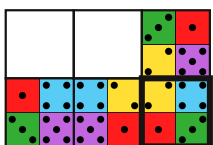
$$= 47 \text{ points}$$



$$4 \times 2 + 5 \times 3 + 2 \times 4$$

$$+ 2 \times 5 + 10$$

$$= 51 \text{ points}$$

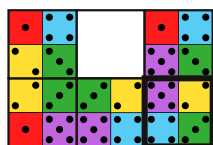


$$2 \times 1 + 3 \times 2 + 2 \times 4$$

$$+ 2 \times 5$$

$$= 2 + 6 + 8 + 10$$

$$= 26 \text{ points}$$

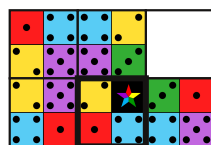


$$2 \times 2 + 3 \times 3 + 2 \times 4$$

$$+ 4 \times 5$$

$$= 4 + 9 + 8 + 20$$

$$= 41 \text{ points}$$

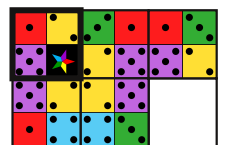


$$2 \times 1 + 2 \times 2 + 3 \times 3$$

$$+ 4 \times 4 + 3 \times 5$$

$$= 2 + 4 + 9 + 16 + 15$$

$$= 46 \text{ points}$$



$$2 \times 1 + 5 \times 2 + 2 \times 4$$

$$+ 5 \times 5 + 10$$

$$= 2 + 10 + 8 + 25 + 10$$

$$= 55 \text{ points}$$

# MATCH POINT

## Éléments de solution

### Compléter

Il faut prendre garde que ce sont les **scores totaux** qui sont à envisager et que les six pièces proposées sont à **placer simultanément** dans les quatre configurations. Tout ceci considéré, la **solution est unique**.



$$4 \times 1 + 2 \times 2 + 2 \times 3 + 2 \times 4 + 2 \times 5$$

$$= 4 + 4 + 6 + 8 + 10$$

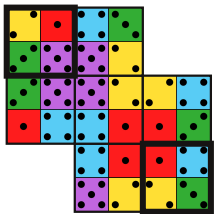
$$= 32 \text{ points}$$



$$2 \times 1 + 2 \times 2 + 2 \times 5$$

$$= 4 + 4 + 10$$

$$= 16 \text{ points}$$

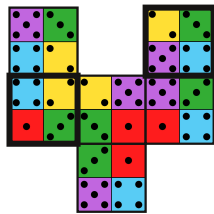


$$4 \times 1 + 5 \times 2 + 2 \times 3$$

$$+ 3 \times 4 + 4 \times 5$$

$$= 4 + 10 + 6 + 12 + 20$$

$$= 52 \text{ points}$$

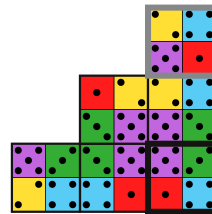


$$3 \times 1 + 3 \times 2 + 3 \times 3$$

$$+ 2 \times 4 + 3 \times 5$$

$$= 3 + 6 + 9 + 8 + 15$$

$$= 41 \text{ points}$$

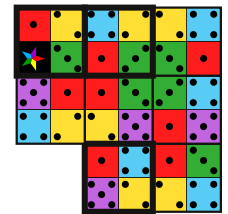


$$2 \times 1 + 2 \times 2 + 5 \times 3$$

$$+ 2 \times 4 + 4 \times 5 + 10$$

$$= 2 + 4 + 15 + 8 + 30$$

$$= 59 \text{ points}$$



$$5 \times 1 + 6 \times 2 + 4 \times 3$$

$$+ 2 \times 5 + 10$$

$$= 5 + 12 + 12 + 10 + 10$$

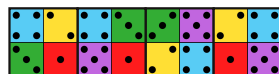
$$= 49 \text{ points}$$

### Paver

Encore une fois, ce sont les **scores totaux** qui sont considérés ici. De par la **non unicité des solutions** par contre, une seule est donnée en exemple pour chaque score visé.



0 point

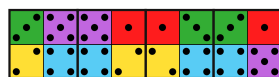


$2 \times 3 = 6$  points

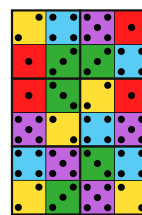


$$2 \times 3 + 2 \times 4 = 6 + 8$$

$$= 14 \text{ points}$$



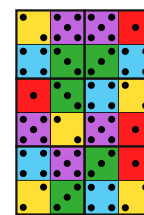
38 points



$$2 \times 1 + 3 \times 3$$

$$= 2 + 9$$

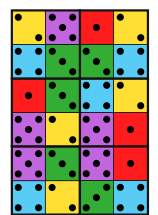
$$= 11 \text{ points}$$



$$2 \times 1 + 3 \times 3$$

$$+ 2 \times 5$$

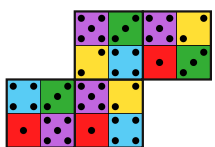
$$= 21 \text{ points}$$



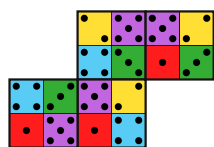
$$2 \times 1 + 3 \times 3$$

$$+ 4 \times 5$$

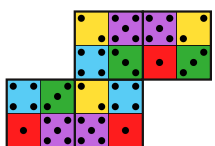
$$= 31 \text{ points}$$



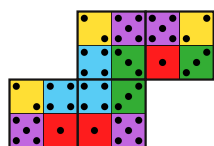
0 point



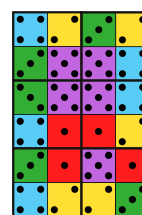
10 points



20 points



30 points

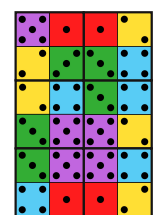


$$3 \times 1 + 2 \times 2 + 2 \times 3$$

$$+ 2 \times 4 + 4 \times 5$$

$$= 3 + 4 + 6 + 8 + 20$$

$$= 41 \text{ points}$$



$$4 \times 1 + 2 \times 2 + 5 \times 3$$

$$+ 2 \times 4 + 4 \times 5$$

$$= 4 + 4 + 15 + 8 + 20$$

$$= 51 \text{ points}$$

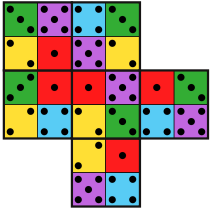
### Tapisser

Encore ici, **scores totaux** et **solutions non uniques**. Une seule est donc donnée en exemple pour chaque score visé.

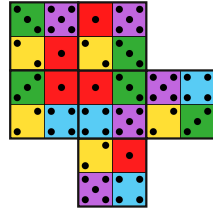
# MATCH POINT

## Éléments de solution

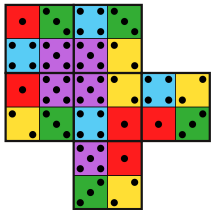
### Tapisser



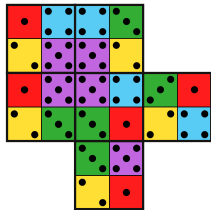
$$\begin{aligned} & 3 \times 1 + 2 \times 2 \\ & = 3 + 4 \\ & = 7 \text{ points} \end{aligned}$$



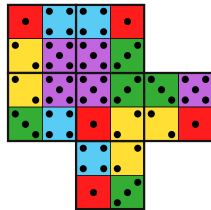
$$\begin{aligned} & 3 \times 1 + 2 \times 3 + 2 \times 4 \\ & = 3 + 6 + 8 \\ & = 17 \text{ points} \end{aligned}$$



$$\begin{aligned} & 3 \times 1 + 2 \times 2 \\ & \quad + 4 \times 5 \\ & = 3 + 4 + 20 \\ & = 27 \text{ points} \end{aligned}$$



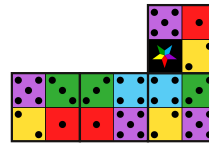
$$\begin{aligned} & 3 \times 3 + 2 \times 4 \\ & \quad + 4 \times 5 \\ & = 9 + 8 + 20 \\ & = 37 \text{ points} \end{aligned}$$



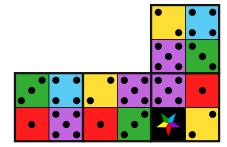
$$\begin{aligned} & 2 \times 2 + 3 \times 3 \\ & \quad + 2 \times 4 + 4 \times 5 \\ & = 47 \text{ points} \end{aligned}$$

### Quadriller

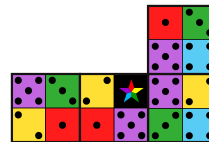
Scores totaux recherchés et solutions non uniques sont de nouveau de mise ici. Un seul exemple de solution est donc proposé pour chaque score visé.



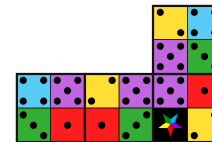
$$\begin{aligned} & 2 \times 1 + 2 \times 3 + 3 \times 4 \\ & = 2 + 6 + 12 \\ & = 20 \text{ points} \end{aligned}$$



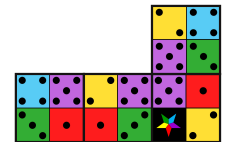
$$\begin{aligned} & 2 \times 3 + 3 \times 5 \\ & = 6 + 15 \\ & = 21 \text{ points} \end{aligned}$$



$$\begin{aligned} & 2 \times 1 + 4 \times 5 \\ & = 2 + 20 \\ & = 22 \text{ points} \end{aligned}$$



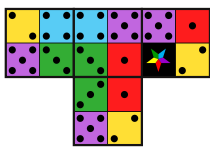
$$\begin{aligned} & 2 \times 1 + 2 \times 3 \\ & \quad + 3 \times 5 \\ & = 2 + 6 + 15 \\ & = 23 \text{ points} \end{aligned}$$



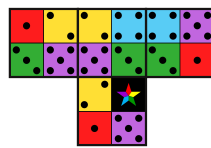
$$\begin{aligned} & 2 \times 2 + 4 \times 5 \\ & = 4 + 20 \\ & = 24 \text{ points} \end{aligned}$$

### Quadriller

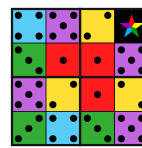
### Quadriller



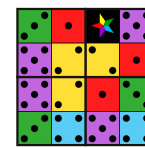
$$\begin{aligned} & 3 \times 1 + 3 \times 3 + 2 \times 4 \\ & \quad + 2 \times 5 \\ & = 3 + 9 + 8 + 10 \\ & = 30 \text{ points} \end{aligned}$$



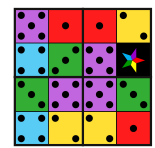
$$\begin{aligned} & 2 \times 2 + 3 \times 3 + 2 \times 4 \\ & \quad + 2 \times 5 \\ & = 4 + 9 + 8 + 10 \\ & = 31 \text{ points} \end{aligned}$$



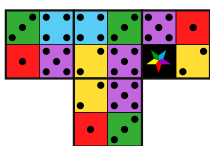
$$\begin{aligned} & 3 \times 1 \\ & = 3 \text{ points} \end{aligned}$$



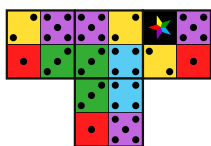
$$\begin{aligned} & 2 \times 1 + 3 \times 2 \\ & \quad + 2 \times 5 \\ & = 18 \text{ points} \end{aligned}$$



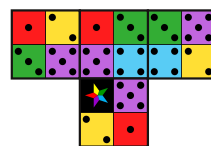
$$\begin{aligned} & 2 \times 1 + 3 \times 2 \\ & \quad + 2 \times 3 + 3 \times 5 \\ & = 27 \text{ points} \end{aligned}$$



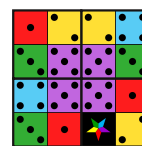
$$\begin{aligned} & 2 \times 2 + 2 \times 4 \\ & \quad + 4 \times 5 \\ & = 4 + 8 + 20 \\ & = 32 \text{ points} \end{aligned}$$



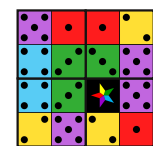
$$\begin{aligned} & 3 \times 2 + 3 \times 3 \\ & \quad + 2 \times 4 + 3 \times 5 \\ & = 33 \text{ points} \end{aligned}$$



$$\begin{aligned} & 2 \times 3 + 2 \times 4 \\ & \quad + 4 \times 5 \\ & = 6 + 8 + 20 \\ & = 34 \text{ points} \end{aligned}$$



$$\begin{aligned} & 2 \times 1 + 2 \times 2 \\ & \quad + 4 \times 5 + 10 \\ & = 2 + 4 + 20 + 10 \\ & = 36 \text{ points} \end{aligned}$$



$$\begin{aligned} & 2 \times 1 + 4 \times 3 + 2 \times 4 \\ & \quad + 2 \times 5 + 10 \\ & = 2 + 12 + 8 + 10 + 10 \\ & = 42 \text{ points} \end{aligned}$$

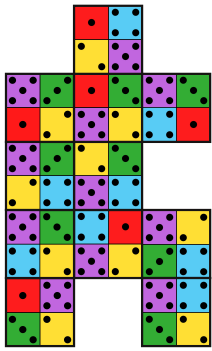
# MATCH POINT

## Éléments de solution

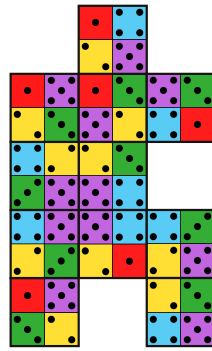
### Carreler

Du fait de la liberté totale laissée ici de choix et d'emploi des pièces, les **solutions ne peuvent être uniques**. Un seul **exemple de solution** est donc proposé pour chaque score visé.

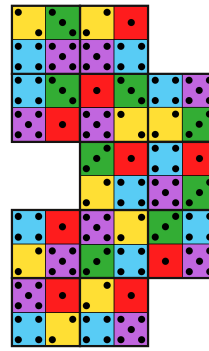
Enfin, bien que ce ne soit pas imposé par la consigne, le choix a été fait de proposer des exemples de solutions qui **utilisent** pour chaque défi le **même lot de pièces**.



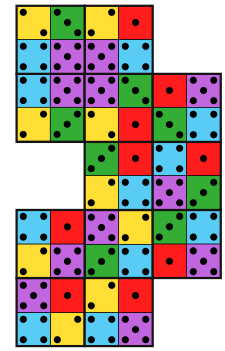
$$2 \times 4 \\ = 8 \text{ points}$$



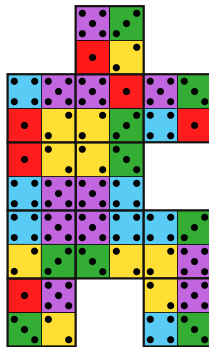
$$4 \times 2 + 3 \times 4 + 4 \times 5 + 10 \\ = 8 + 12 + 20 + 10 \\ = 50 \text{ points}$$



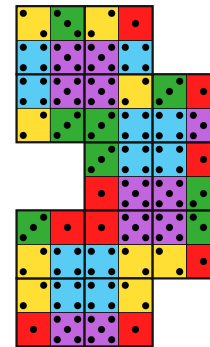
$$2 \times 2 + 2 \times 4 + 2 \times 5 \\ = 4 + 8 + 10 \\ = 22 \text{ points}$$



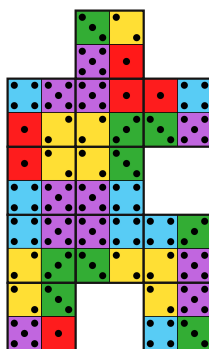
$$2 \times 1 + 2 \times 4 + 4 \times 5 + 10 \\ = 2 + 8 + 20 + 10 \\ = 40 \text{ points}$$



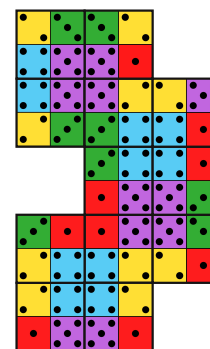
$$2 \times 1 + 7 \times 2 + 4 \times 3 + 5 \times 4 + 8 \times 5 + 10 + 10 \\ = 2 + 14 + 12 + 20 + 40 + 10 + 10 \\ = 108 \text{ points}$$



$$3 \times 1 + 5 \times 2 + 5 \times 3 + 10 \times 4 + 10 \times 5 + 4 \times 10 \\ = 3 + 10 + 15 + 40 + 50 + 40 \\ = 158 \text{ points}$$



$$5 \times 1 + 9 \times 2 + 6 \times 3 + 5 \times 4 + 9 \times 5 + 10 + 10 \\ = 5 + 18 + 18 + 20 + 45 + 10 + 10 \\ = 126 \text{ points}$$



$$5 \times 1 + 8 \times 2 + 7 \times 3 + 10 \times 4 + 10 \times 5 + 4 \times 10 \\ = 5 + 16 + 21 + 40 + 50 + 40 \\ = 172 \text{ points}$$