

When Grids Go Wrong

(Debugging CSS Grid)



- **Front End Developer at Ordoo**
- **Mozilla Tech Speaker**
- **Author of CSS { In Real Life }**

```
.sidebar {  
  float: left;  
  width: 200px;  
}  
  
.clearfix {  
  overflow: auto;  
}  
  
.clearfix::after {  
  content: '';  
  clear: both;  
  display: table;  
}
```



CSS Grid

CSS Grid

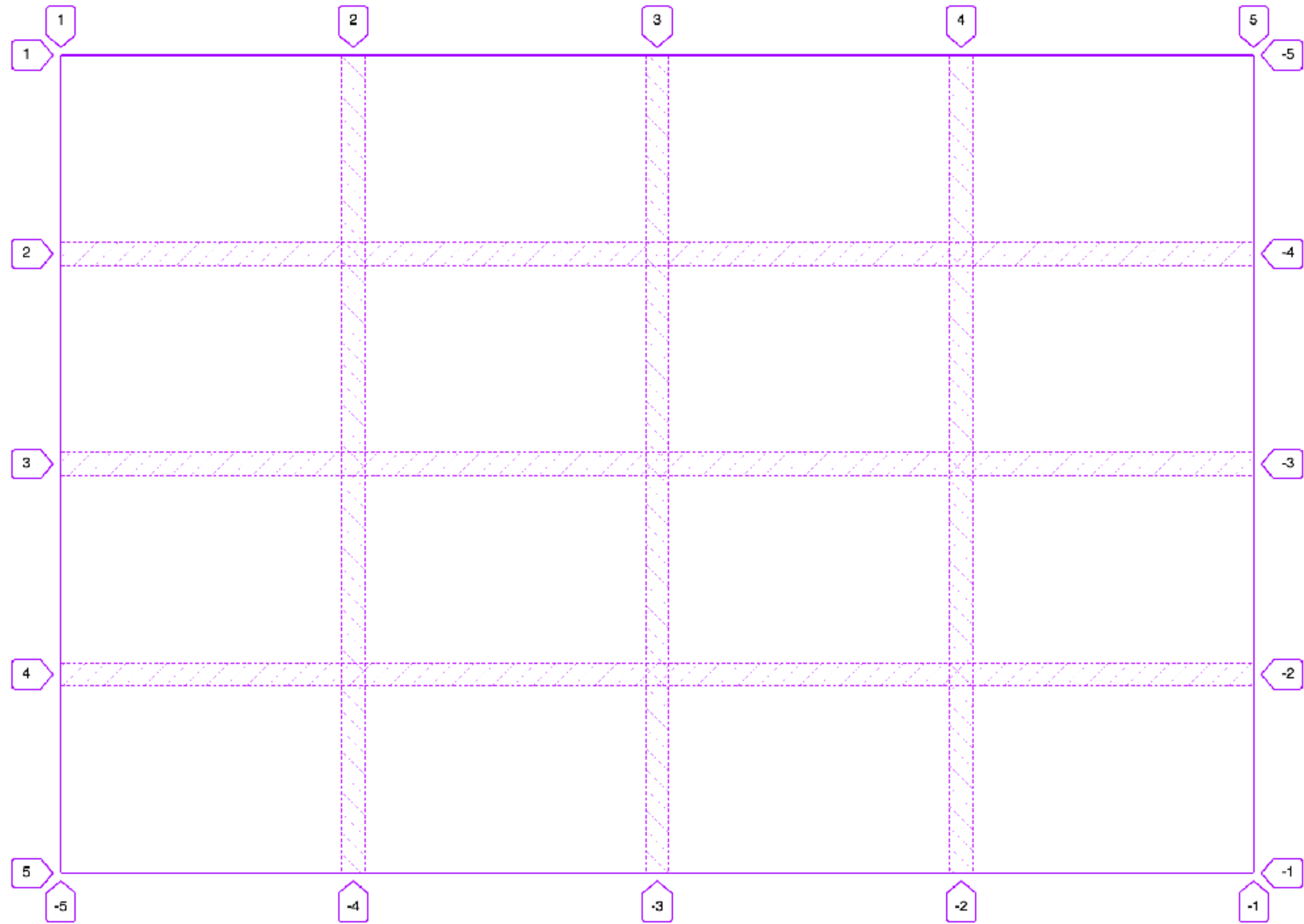
+



Scaffolding

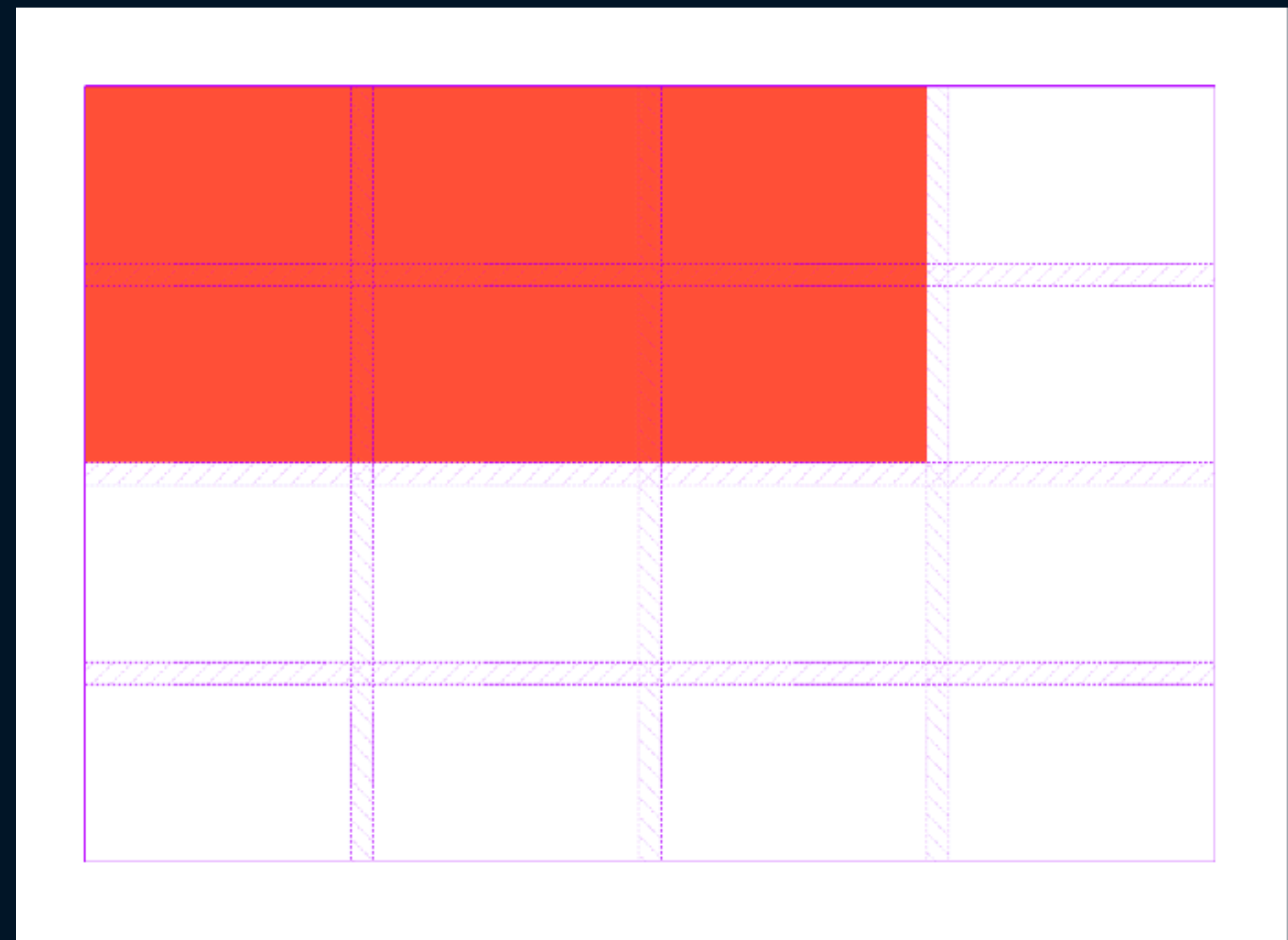
(building the grid)

```
.grid {  
  display: grid;  
  grid-template-rows: repeat(4, 8rem);  
  grid-template-columns: repeat(4, 12rem);  
  gap: 1rem;  
}
```



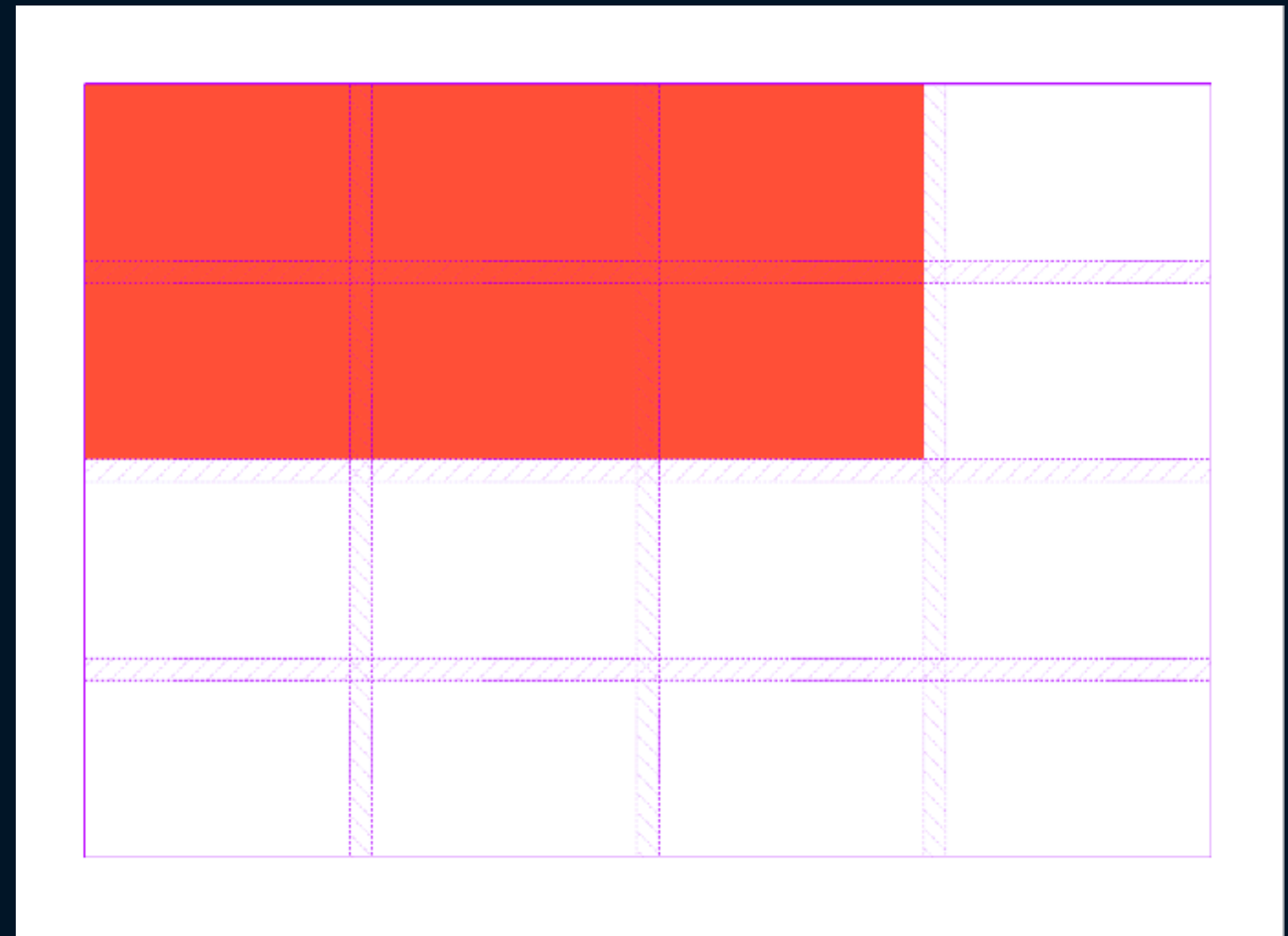
Placing items

```
.a {  
  grid-row: 1 / 3;  
  grid-column: 1 / 4;  
}
```



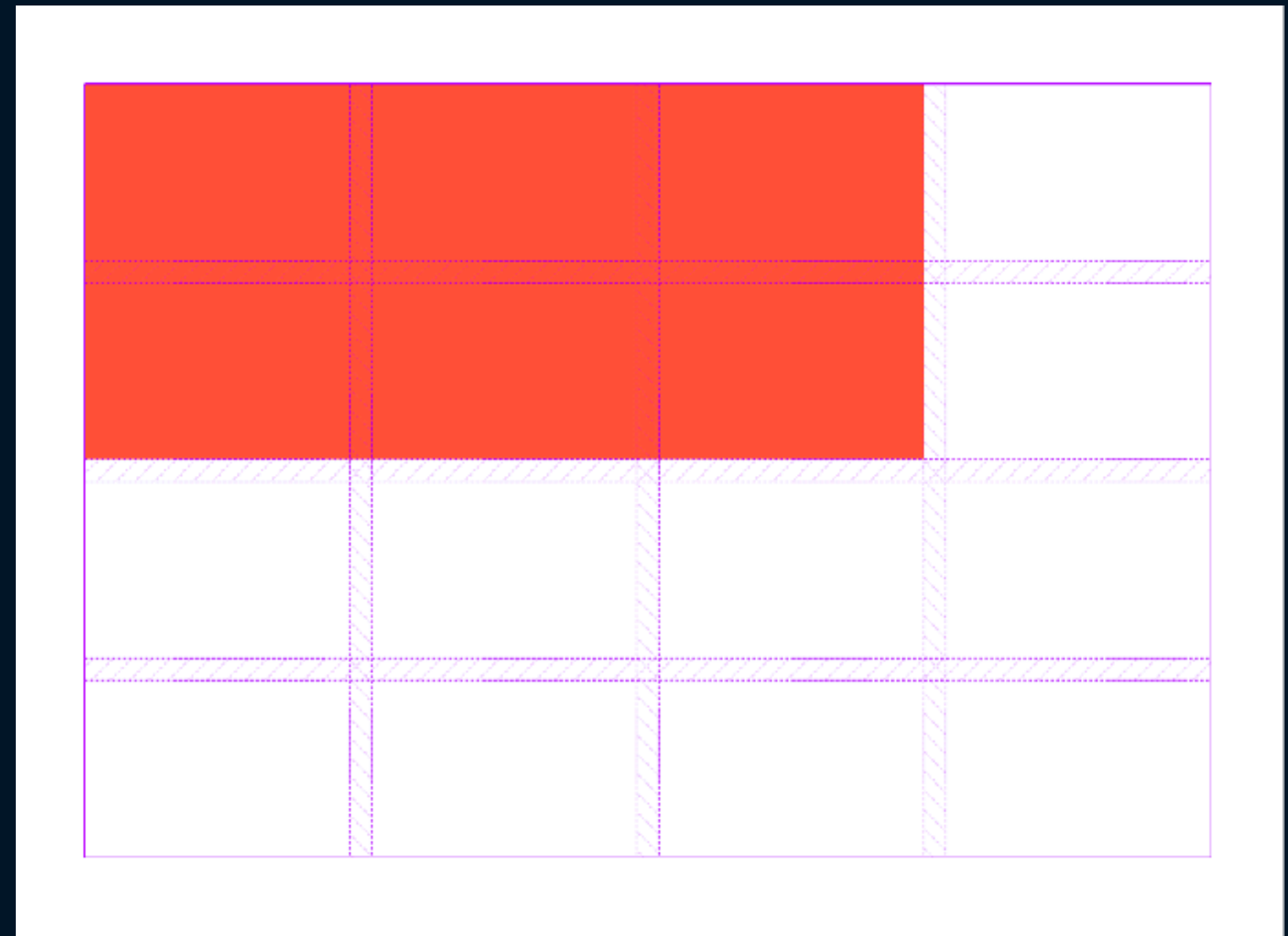
Placing items

```
.a {  
  grid-row: 1 / span 2;  
  grid-column: 1 / span 3;  
}
```



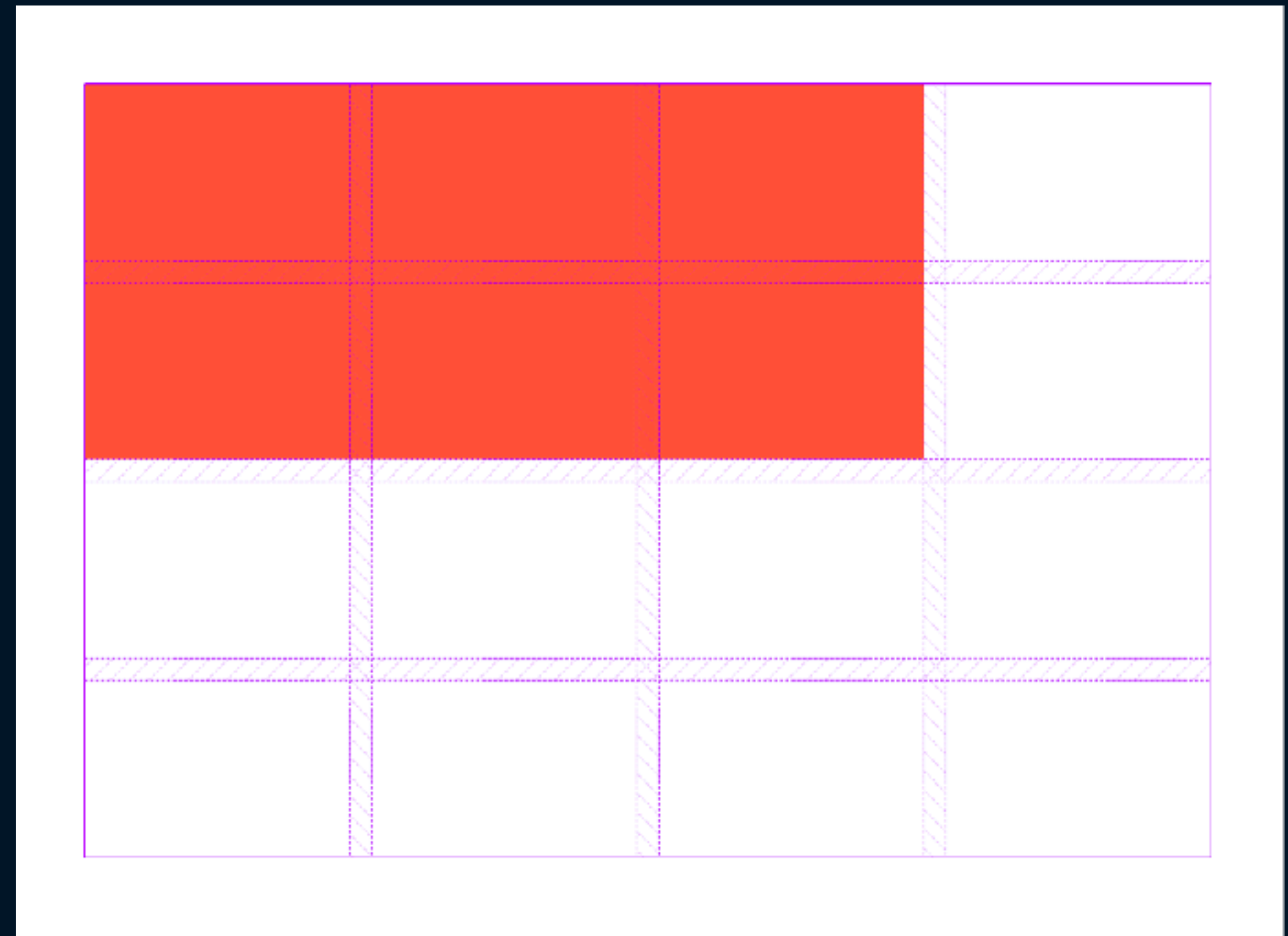
Placing items

```
.a {  
  grid-row: span 2 / 3;  
  grid-column: span 3 / 4;  
}
```



Placing items

```
.a {  
  grid-row: span 2;  
  grid-column: span 3;  
}
```



Placing items

```
.grid {  
  display: grid;  
  grid-template-rows:  
    [a-start] 8rem 8rem [a-end] 8rem 8rem;  
  grid-template-columns: repeat(4, 12rem);  
  gap: 1rem;  
}  
  
.a {  
  grid-row: a;  
  grid-column: 1 / 4;  
}
```

Placing items

```
.grid {  
  display: grid;  
  grid-template-rows:  
    [a-start] 8rem 8rem [a-end] 8rem 8rem;  
  grid-template-columns: repeat(4, 12rem);  
  gap: 1rem;  
}  
  
.a {  
  grid-row: a;  
  grid-column: 1 / 4;  
}
```

Placing items

```
.grid {  
  display: grid;
```

```
  grid-template-rows:  
    [a-start] 8rem 8rem [a-end] 8rem 8rem;  
  grid-template-columns:  
    [a-start] 12rem 12rem 12rem [a-end] 12rem;
```

```
  gap: 1rem;  
}
```

```
.a {  
  grid-area: a;  
}
```

Placing items

```
.grid {  
  display: grid;  
  grid-template-rows:  
    [a-start] 8rem 8rem [a-end] 8rem 8rem;  
  grid-template-columns:  
    [a-start] 12rem 12rem 12rem [a-end] 12rem;  
  gap: 1rem;  
}  
  
.a {  
  grid-area: a;  
}
```

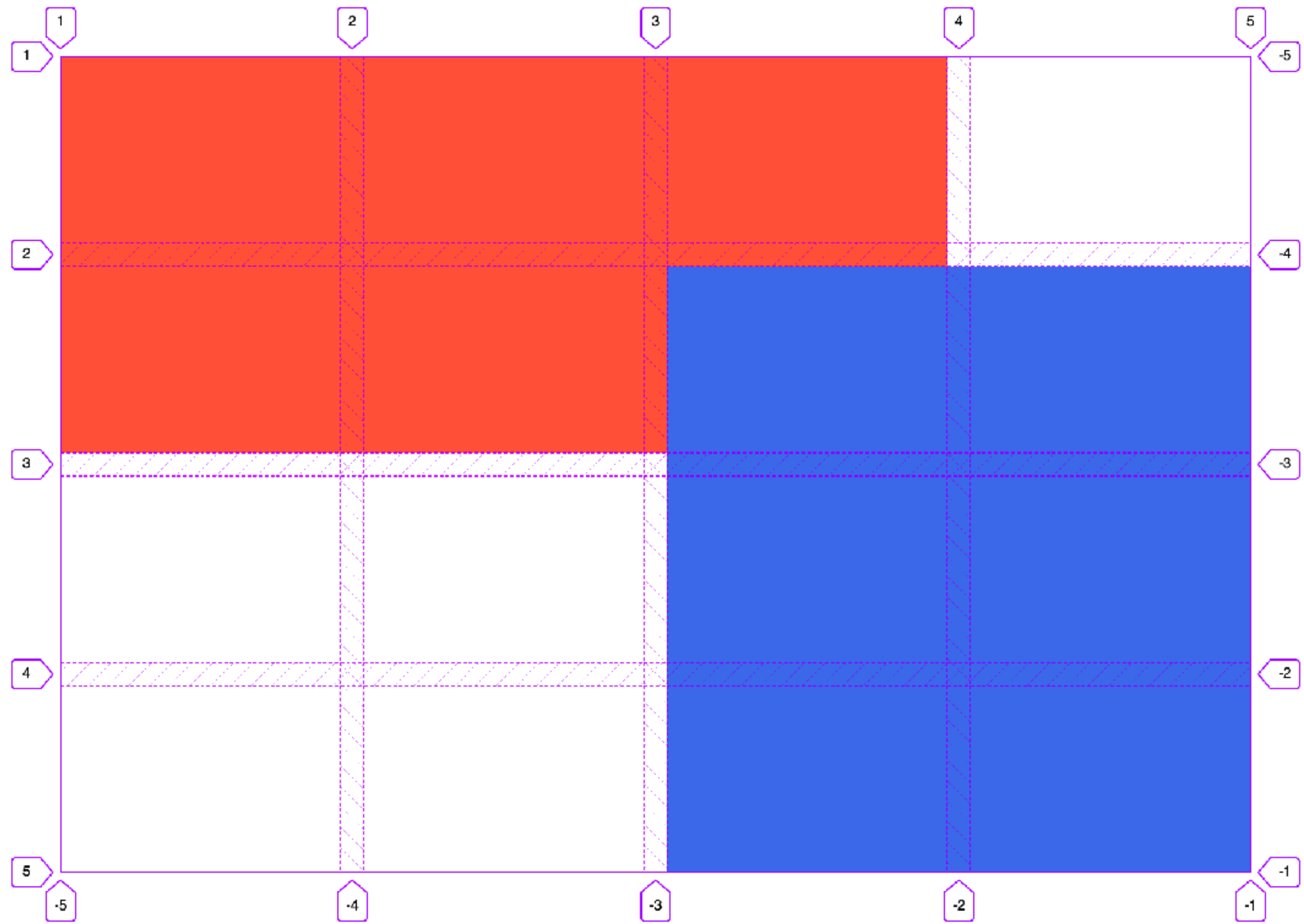
Placing items

```
.a {  
  grid-area: 1 / 1 / 3 / 4;  
}
```

```
/* grid-row-start / grid-column-start / grid-row-end / grid-column-end */
```

Placing items

```
.grid {  
  display: grid;  
  grid-template-rows:  
    [a-start] 8rem 8rem [a-start] 8rem 8rem;  
  grid-template-columns:  
    [a-start] 12rem 12rem 12rem [a-end] 12rem;  
  
  grid-template-areas:  
    'a a a .'  
    'a a a .'  
    '. . . .'  
    '. . . .';  
  
  gap: 1rem;  
}
```



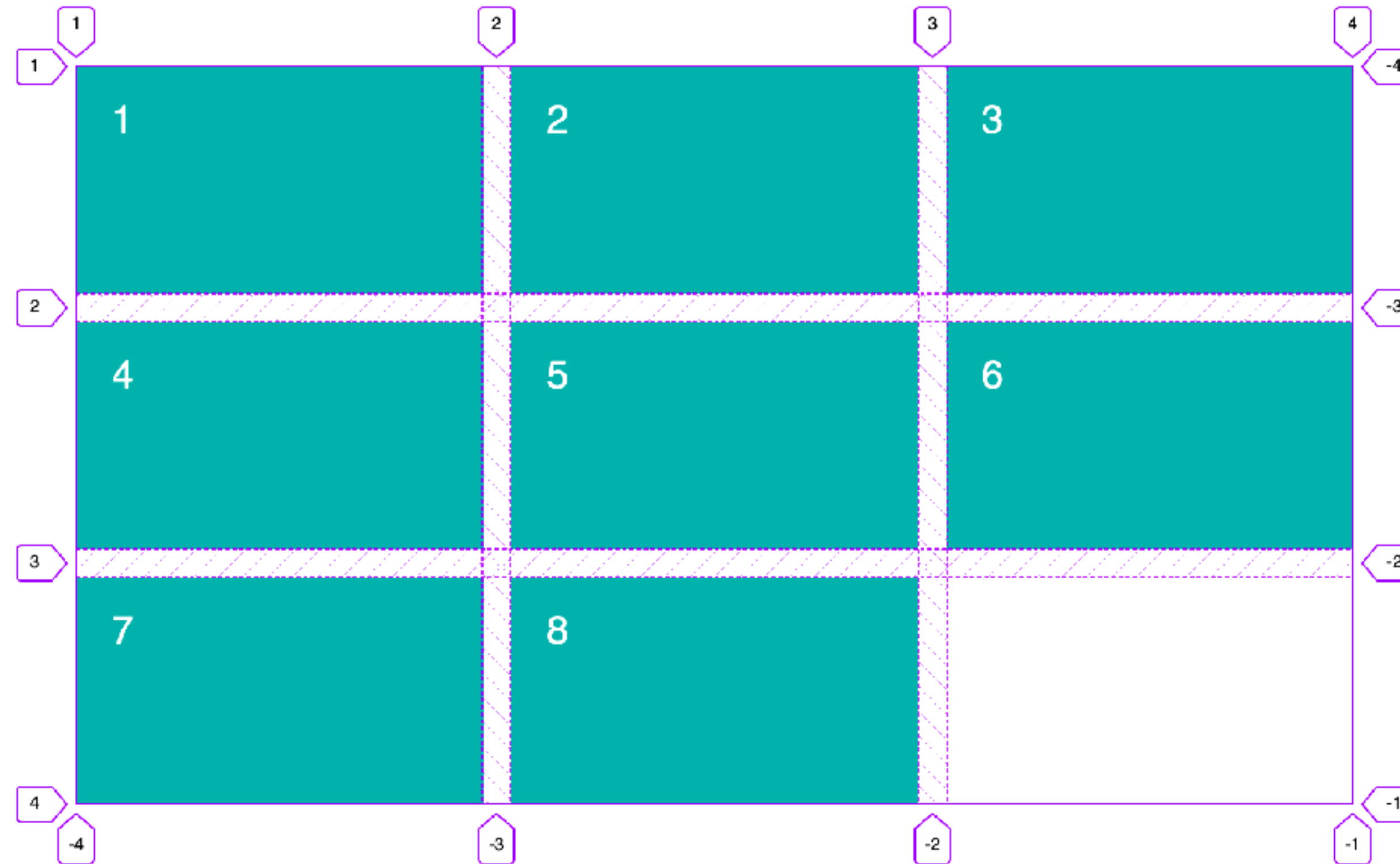
Placing items

```
.grid {  
  display: grid;  
  
  grid-template-rows:  
    [a-start] 8rem 8rem [a-end] 8rem 8rem;  
  grid-template-columns:  
    [a-start] 12rem 12rem 12rem [a-end] 12rem;  
  
  grid-template-areas:  
    '. . . .'  
    '. . b b'  
    '. . b b'  
    '. . b b';  
  gap: 1rem;  
}
```

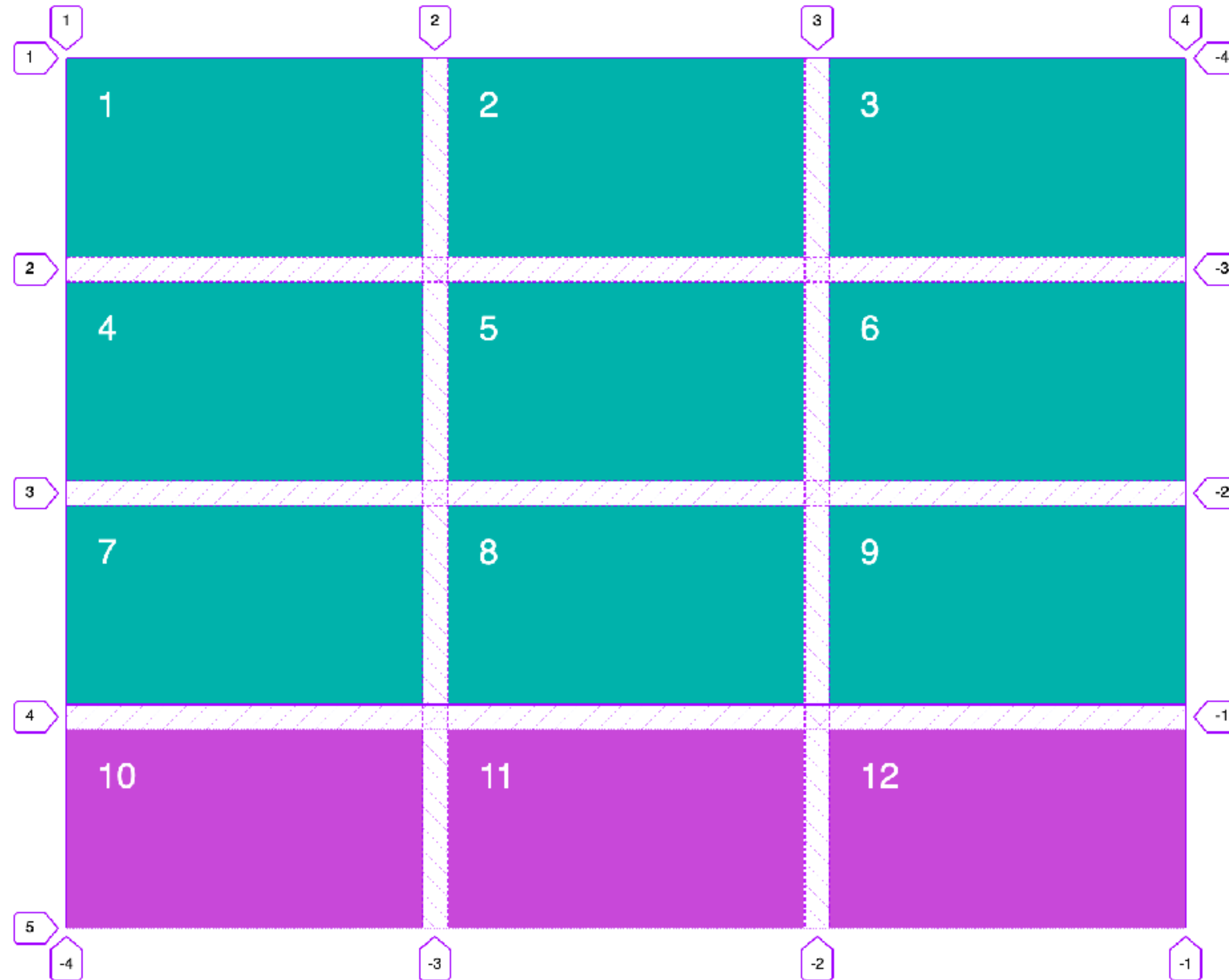
Placing items

```
.grid {  
  display: grid;  
  grid-template-rows:  
    [a-start] 8rem 8rem [a-end] 8rem 8rem;  
  grid-template-columns:  
    [a-start] 12rem 12rem 12rem [a-end] 12rem;  
  
  grid-template-areas:  
    ' . . . '  
    ' . . b b '  
    ' . . b b '  
    ' . . b b ' ;  
  
  gap: 1rem;  
}
```

Auto placement

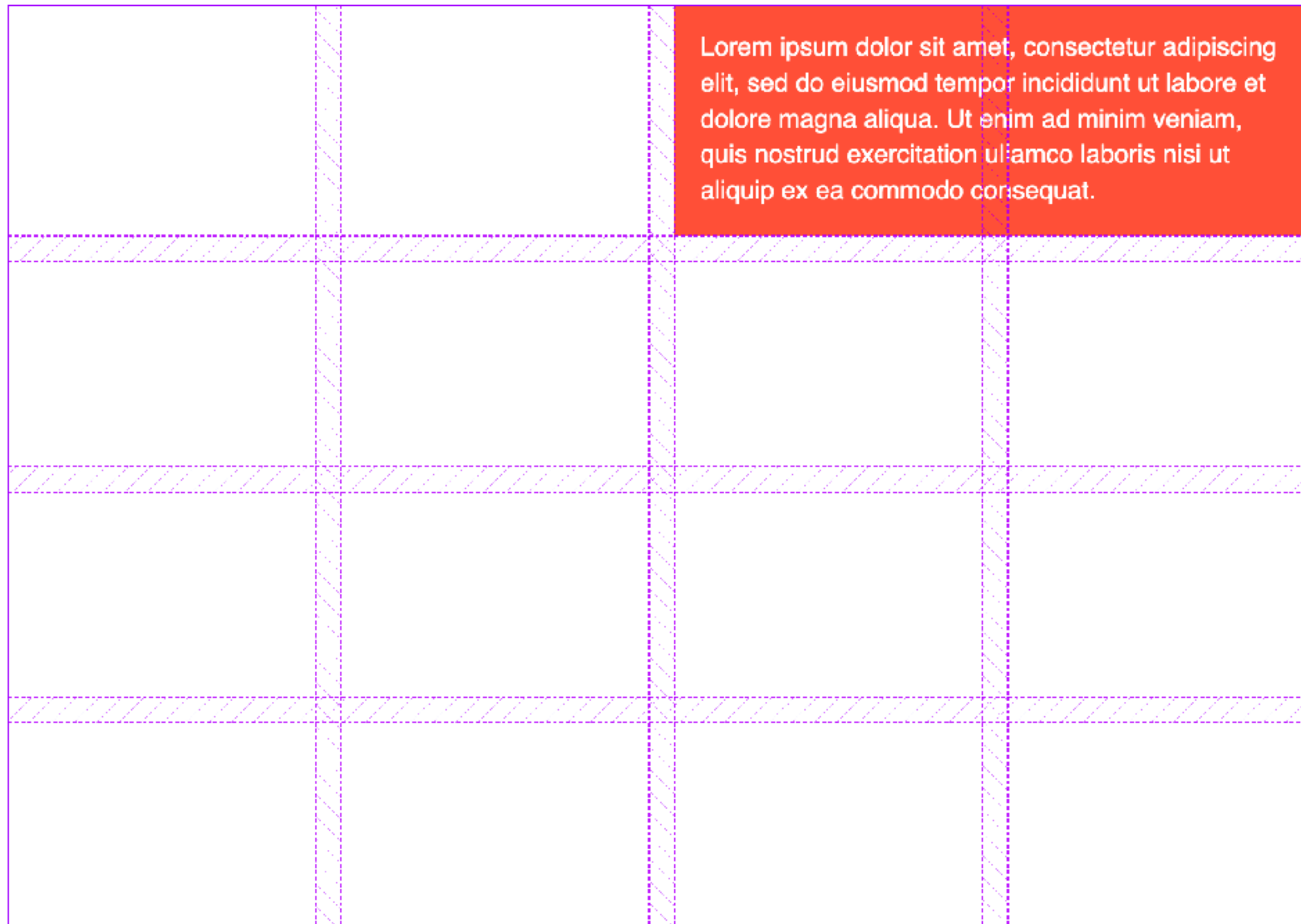


Auto placement

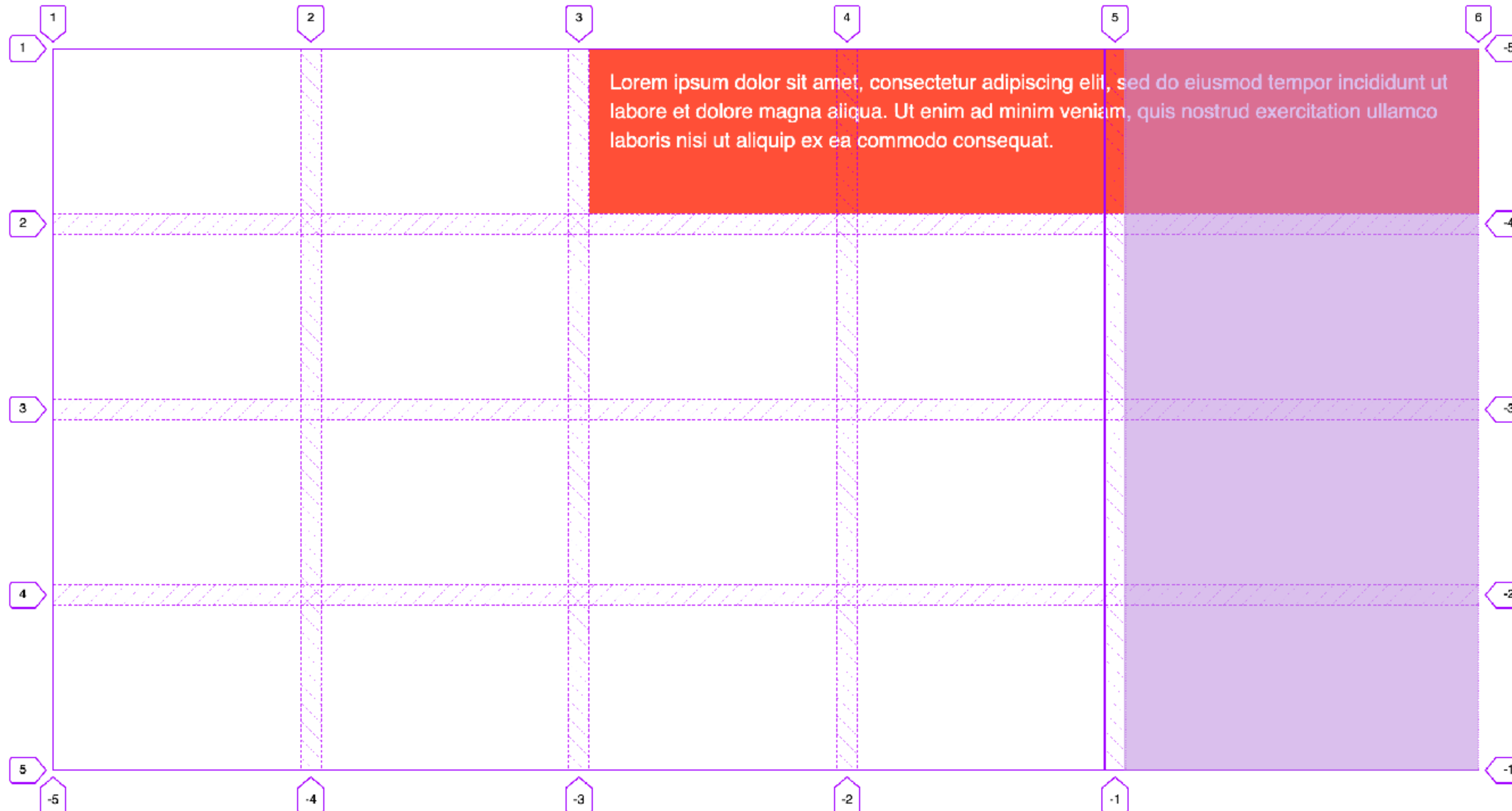


Accidental implicit tracks

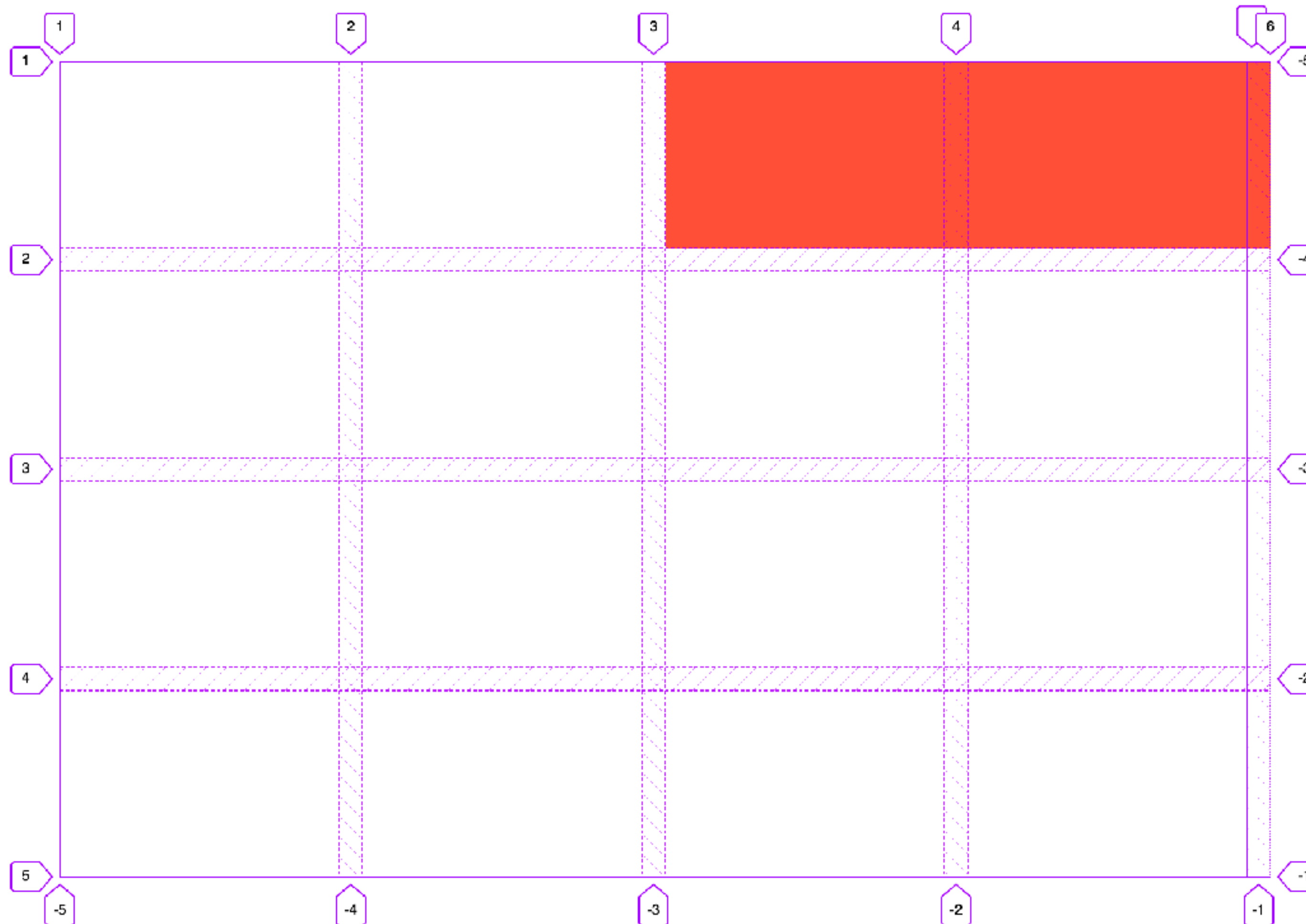
```
grid-column: 3 / span 2;
```

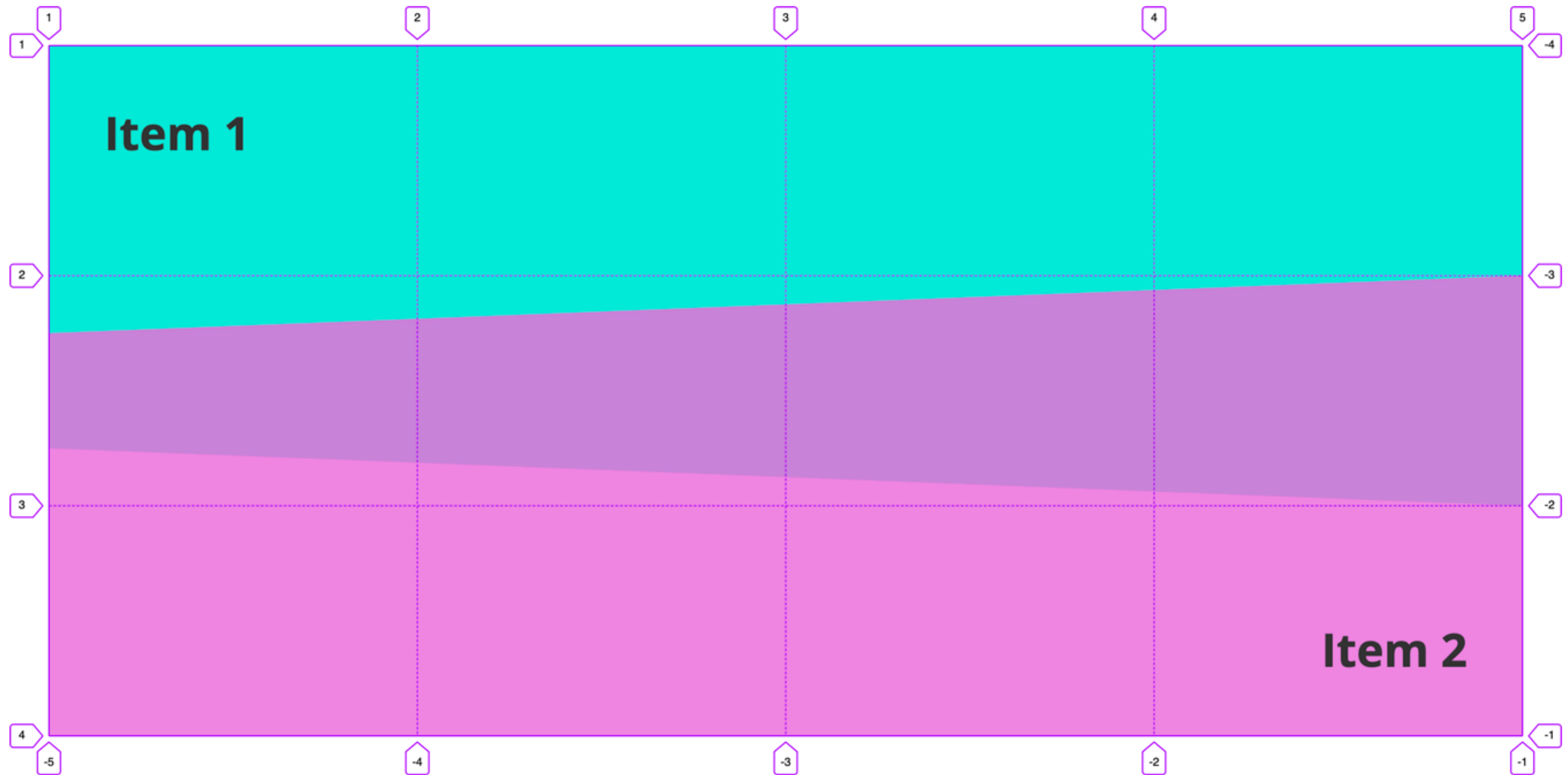


```
grid-column: 3 / span 3;
```



```
grid-column: 3 / span 3;
```





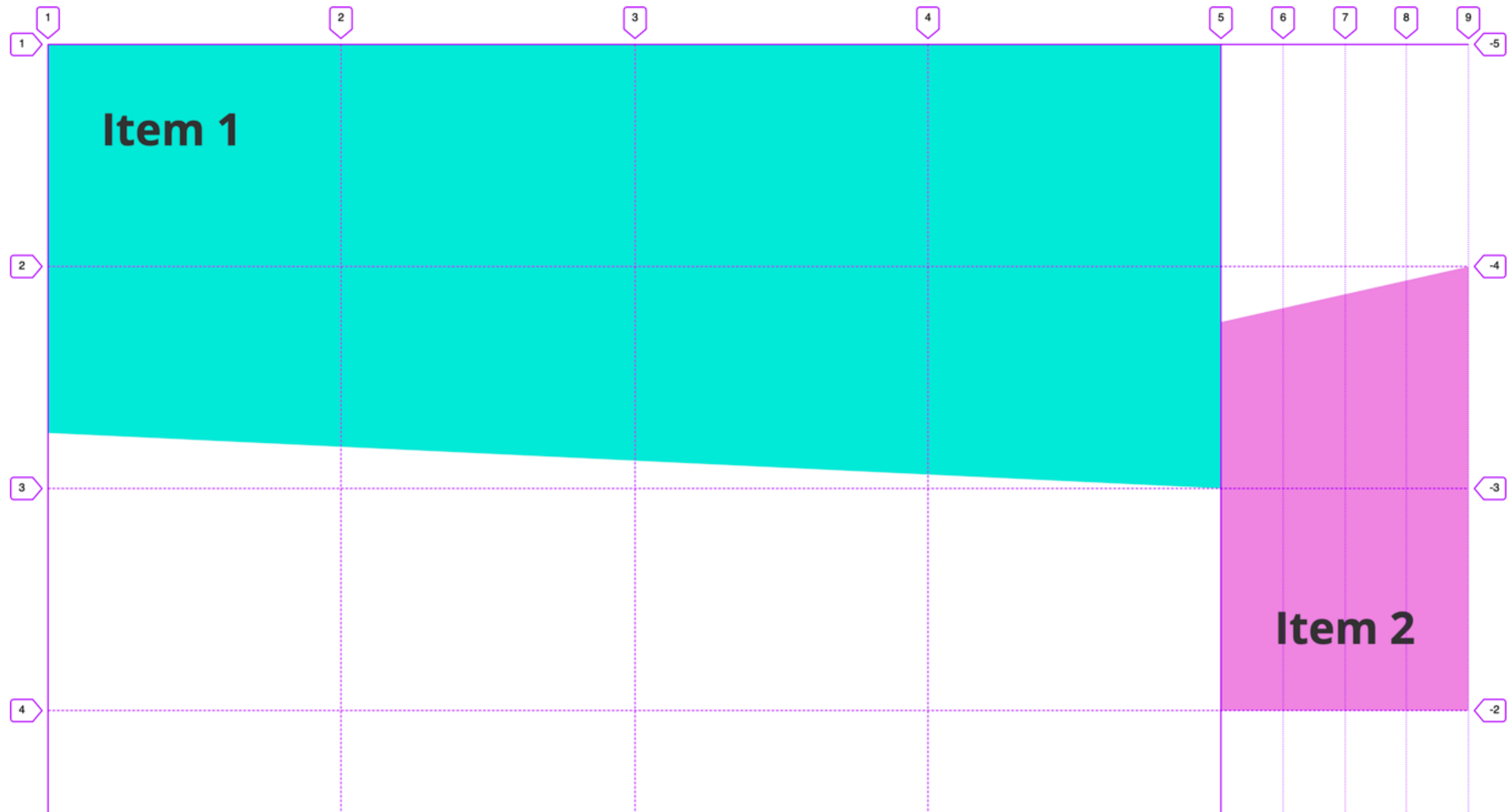
```
.grid {  
  grid-template-columns: repeat(4, 1fr);  
  grid-template-rows: repeat(3, 8rem);  
}  
  
.a {  
  grid-column: span 4;  
  grid-row: 1 / span 2;  
}  
  
.b {  
  grid-column: span 4;  
  grid-row: 2 / span 2;  
}
```

```
.grid {  
  grid-template-columns: repeat(4, 1fr);  
  grid-template-rows: repeat(4, 8rem);  
}  
  
.a {  
  grid-column: span 4;  
  grid-row: 1 / span 2;  
}  
  
.b {  
  grid-column: span 4;  
  grid-row: 2 / span 2;  
}
```

```
.grid {  
  grid-template-columns: repeat(4, 1fr);  
  grid-template-rows: repeat(4, 8rem);  
}  
  
.a {  
  grid-column: span 4;  
  grid-row: 1 / 3;  
}  
  
.b {  
  grid-column: span 4;  
  grid-row: 2 / 4;  
}
```

Item 1

Item 2



```
.grid {  
  grid-template-columns: repeat(4, 1fr);  
  grid-template-rows: repeat(4, 8rem);  
}  
  
.a {  
  grid-column: span 4;  
  grid-row: 1 / span 2;  
}  
  
.b {  
  grid-column: span 4;  
  grid-row: 2 / span 2;  
}
```

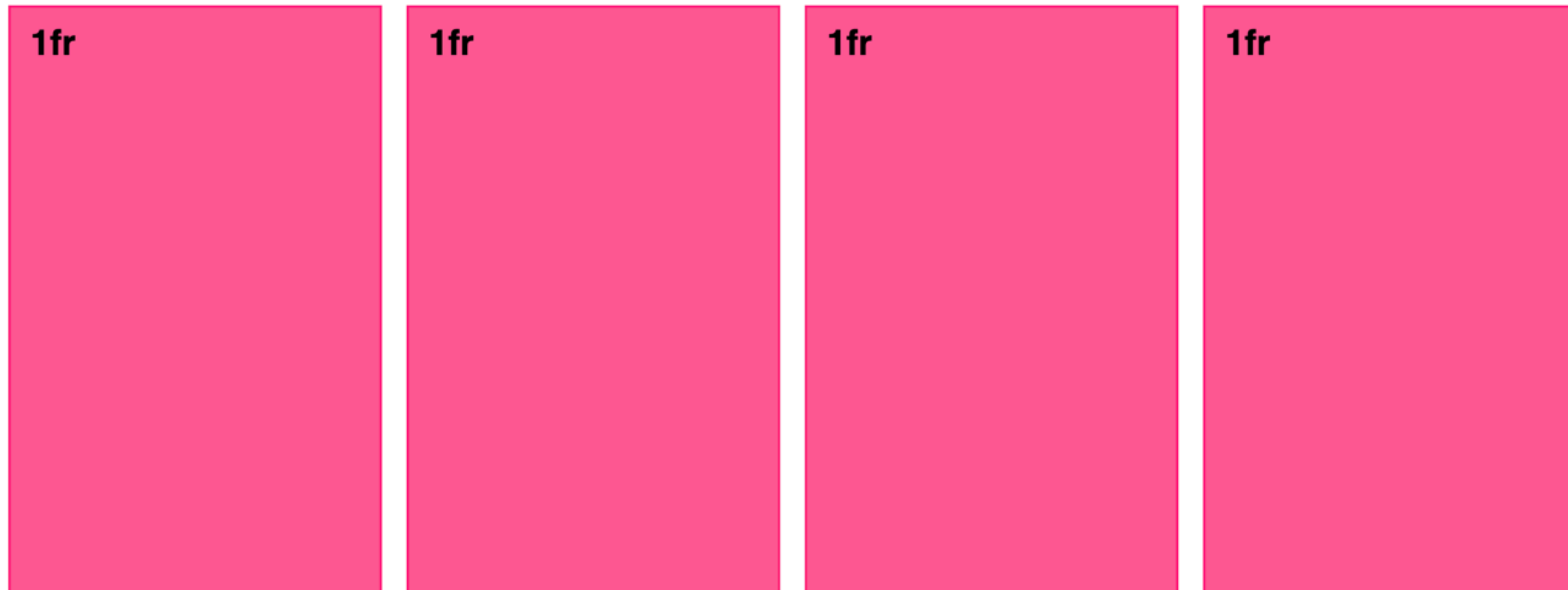
```
.grid {  
  grid-template-columns: repeat(4, 1fr);  
  grid-template-rows: repeat(4, 8rem);  
}  
  
.a {  
  grid-column: 1 / span 4;  
  grid-row: 1 / span 2;  
}  
  
.b {  
  grid-column: 1 / span 4;  
  grid-row: 2 / span 2;  
}
```

```
.grid {  
  grid-template-columns: repeat(4, 1fr);  
  grid-template-rows: repeat(4, 8rem);  
}  
  
.a {  
  grid-column: 1 / -1;  
  grid-row: 1 / span 2;  
}  
  
.b {  
  grid-column: 1 / -1;  
  grid-row: 2 / span 2;  
}
```

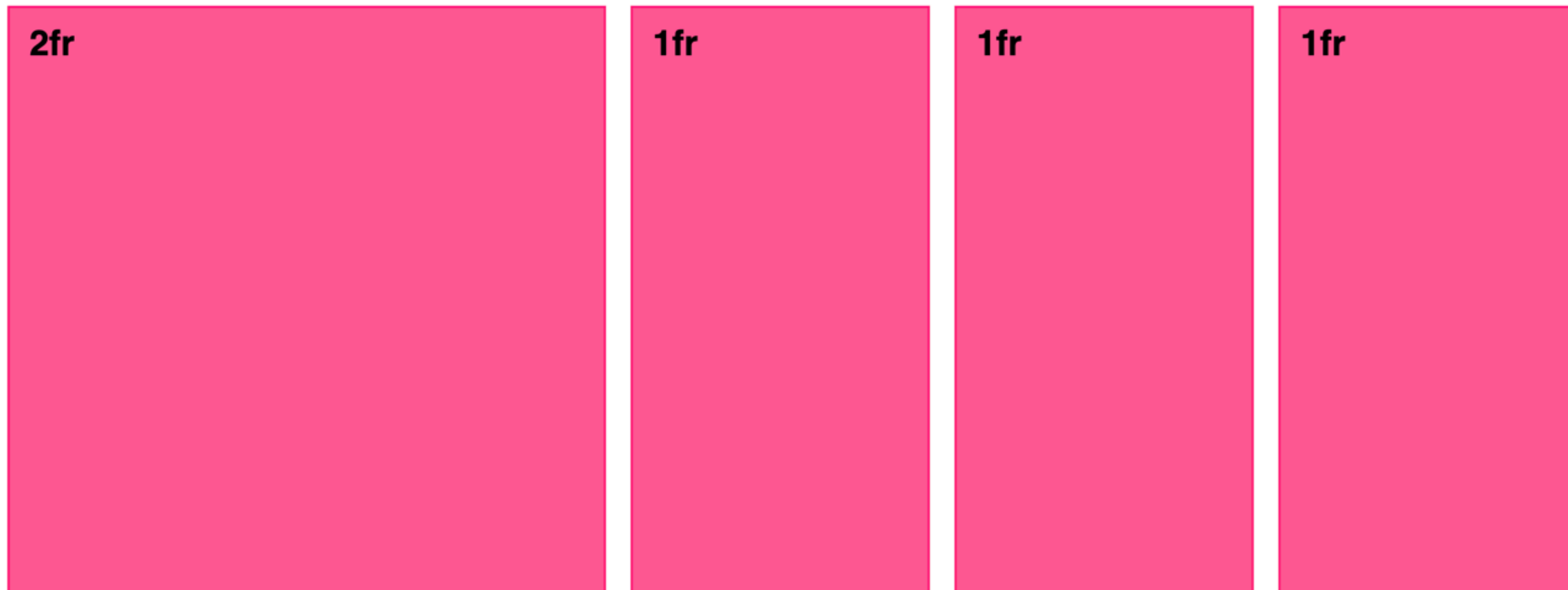
Equal-width columns

```
.grid {  
  display: grid;  
  grid-template-columns: repeat(4, 1fr);  
  gap: 40px;  
}
```

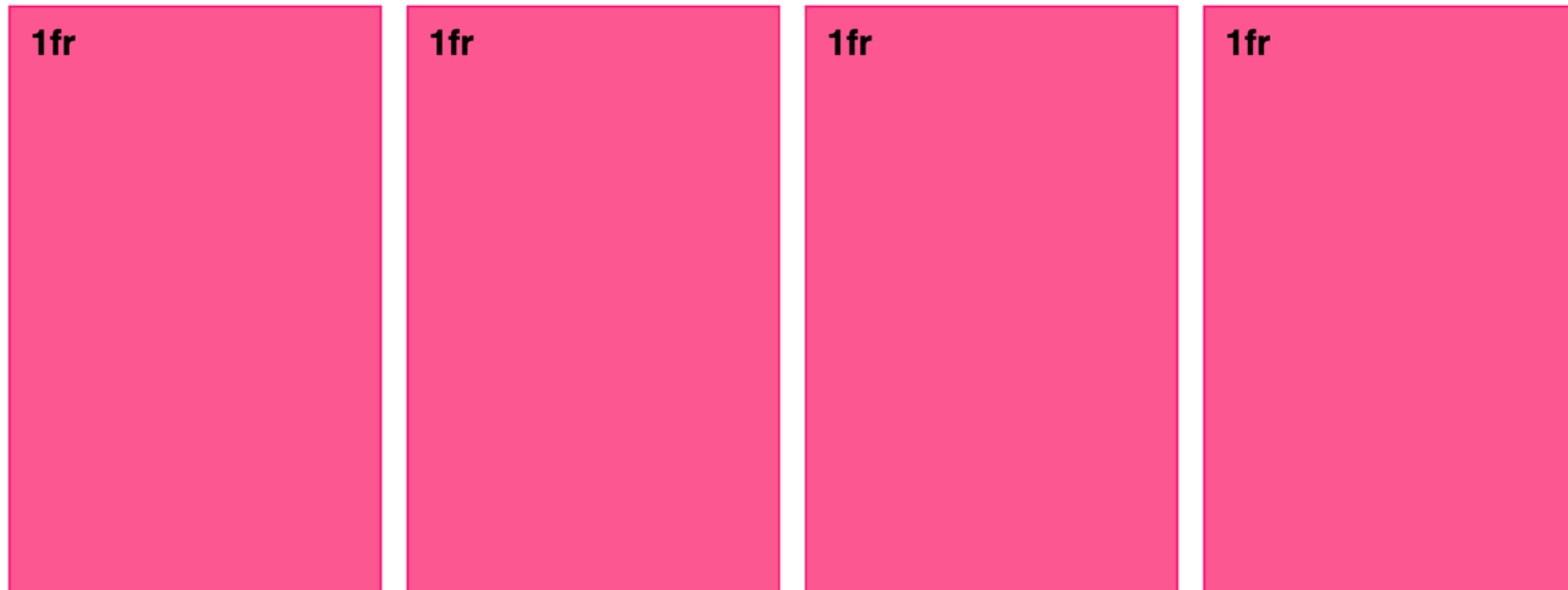
```
grid-template-columns: repeat(4, 1fr);
```



```
grid-template-columns: 2fr repeat(3, 1fr);
```



```
grid-template-columns: repeat(4, 1fr);
```



```
grid-template-columns: repeat(4, 1fr);
```

Gummies pudding chocolate
bar apple pie cookie.
Macaroon tiramisu topping
powder sesame snaps
dessert icing. Bear claw sugar
plum donut. Wafer liquorice
dessert biscuit jujubes.

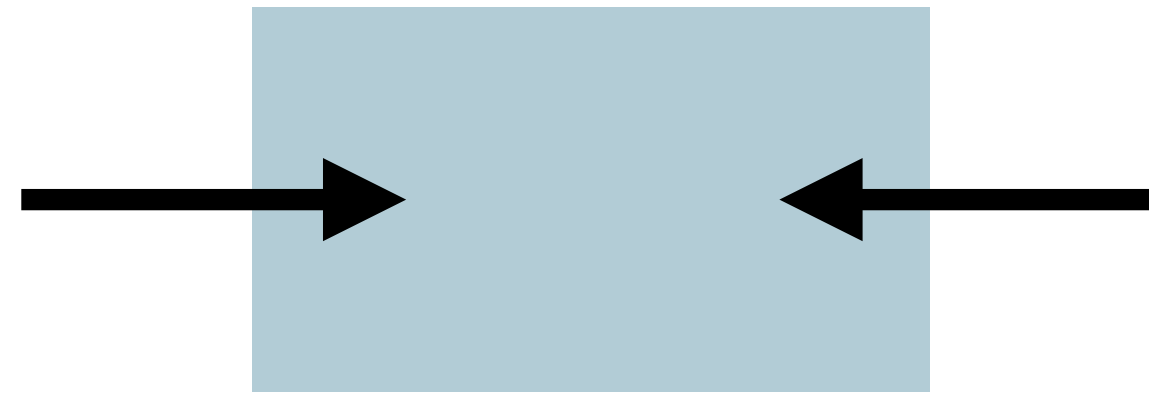
Gingerbread lemon drops
candy canes. Topping
croissant lemon drops cake
gummies soufflé liquorice
muffin. Wafer jujubes sweet
roll cotton candy carrot cake
pie sesame snaps bonbon
carrot cake. Pastry
gingerbread gummi bears.

Icing powder **gingerbread**.
Pudding lollipop dragée toffee
jelly caramels soufflé biscuit.
Powder tart marzipan ice
cream jelly beans tart wafer.

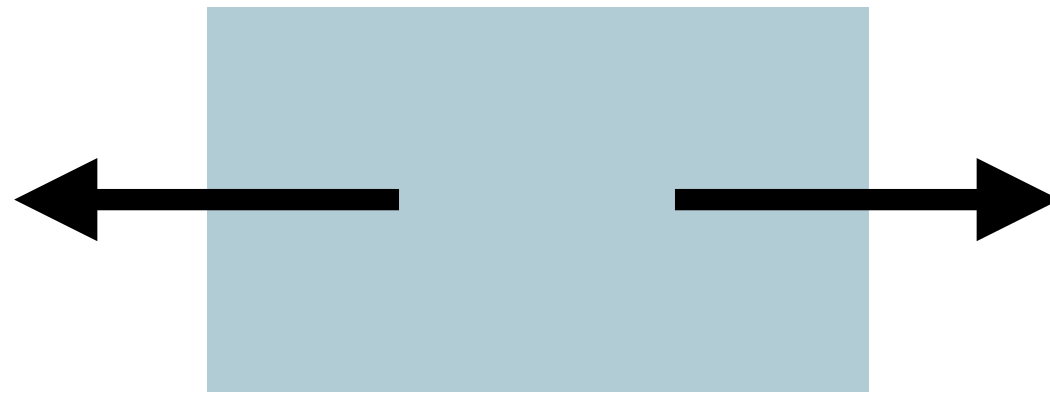
Gummies pudding chocolate bar
apple pie cookie. **Macaroon**
tiramisu topping powder sesame
snaps dessert icing. Bear claw
sugar plum donut. Wafer liquorice
dessert biscuit jujubes.

Gingerbread lemon drops candy
canes. Topping croissant lemon
drops cake gummies soufflé
liquorice muffin. Wafer jujubes
sweet roll cotton candy carrot
cake pie sesame snaps bonbon
carrot cake. Pastry gingerbread
gummi bears.

Icing powder **gingerbread**.
Pudding lollipop dragée toffee
jelly caramels soufflé biscuit.
Powder tart marzipan ice cream
jelly beans tart wafer.



Extrinsic sizing
Context-based



Intrinsic sizing
Content-based

```
grid-template-columns: repeat(4, 1fr);
```

Gummies pudding
chocolate bar apple pie
cookie. **Macaroon**
tiramisu topping powder
sesame snaps dessert
icing. Bear claw sugar
plum donut. Wafer
liquorice dessert biscuit
jubes.

Gingerbread

Icing powder
gingerbread. Pudding
lollipop dragée toffee
jelly caramels soufflé
biscuit. Powder tart
marzipan ice cream jelly
beans tart wafer.

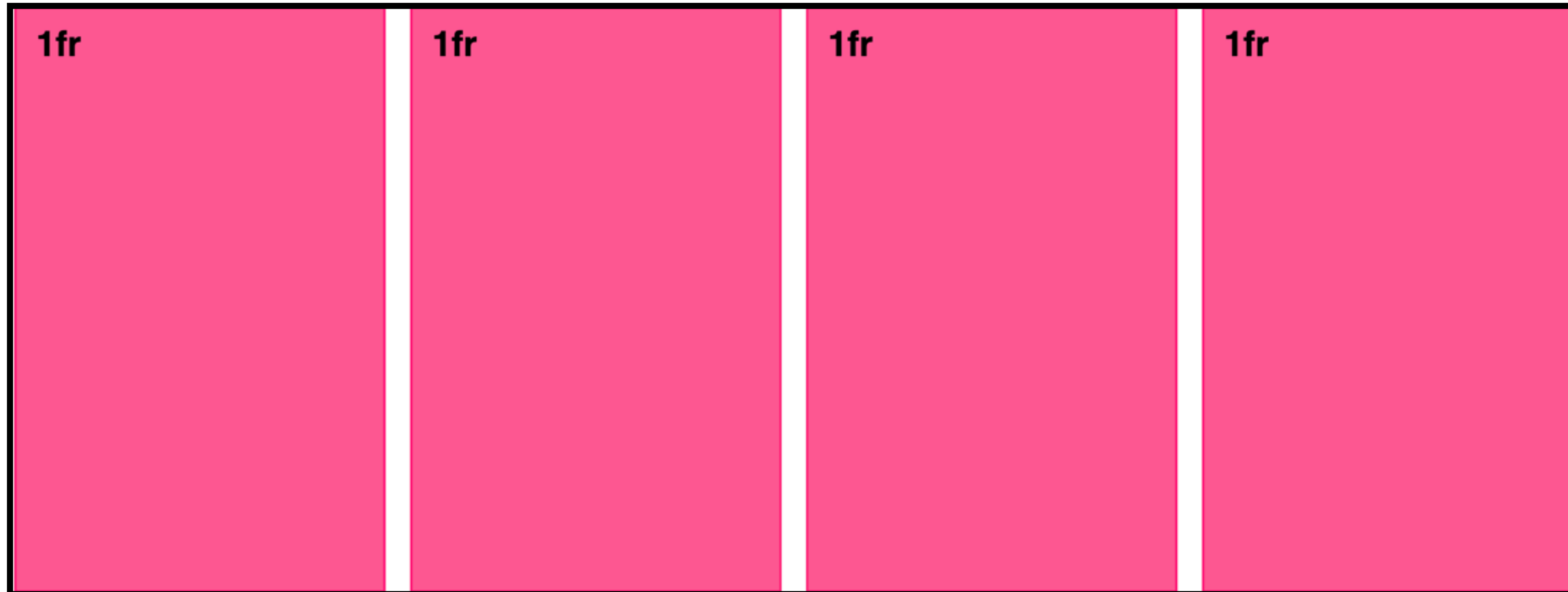
```
grid-template-columns: repeat(4, minmax(0, 1fr));
```

Gummies pudding chocolate
bar apple pie cookie.
Macaroon tiramisu topping
powder sesame snaps
dessert icing. Bear claw sugar
plum donut. Wafer liquorice
dessert biscuit jujubes.

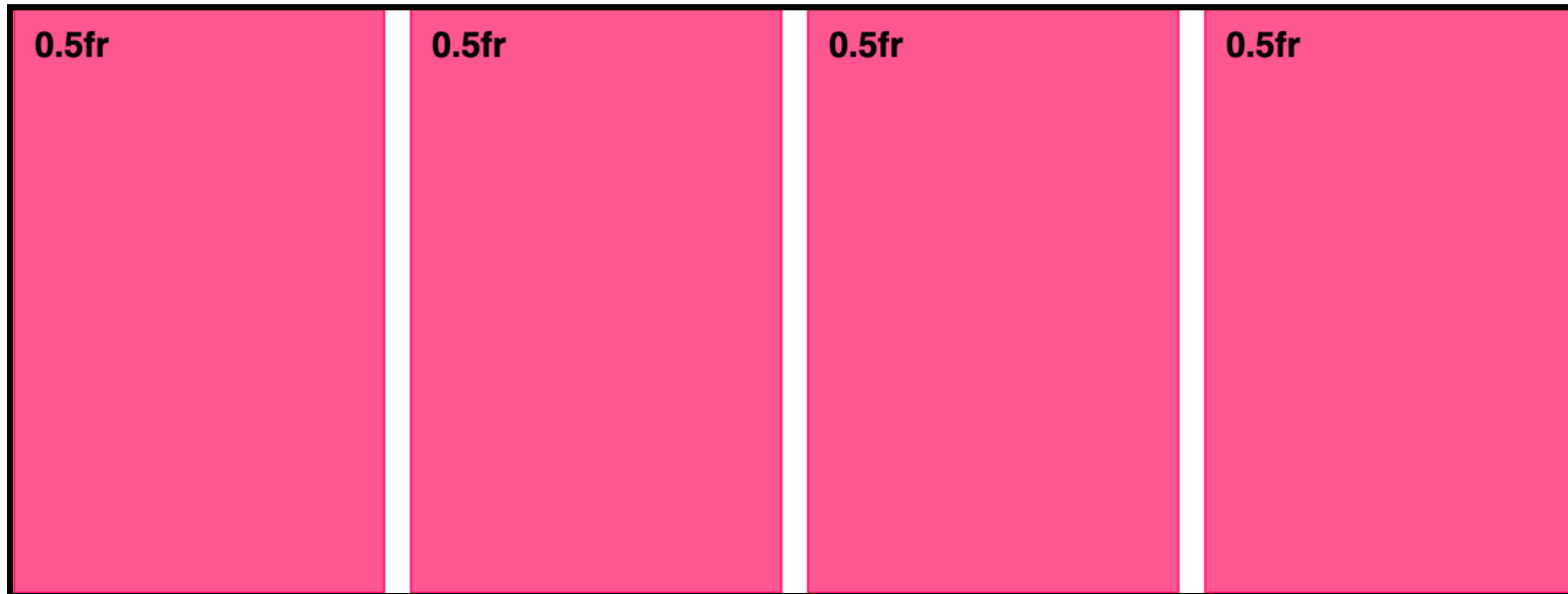
Gingerbread

Icing powder **gingerbread**.
Pudding lollipop dragée toffee
jelly caramels soufflé biscuit.
Powder tart marzipan ice
cream jelly beans tart wafer.

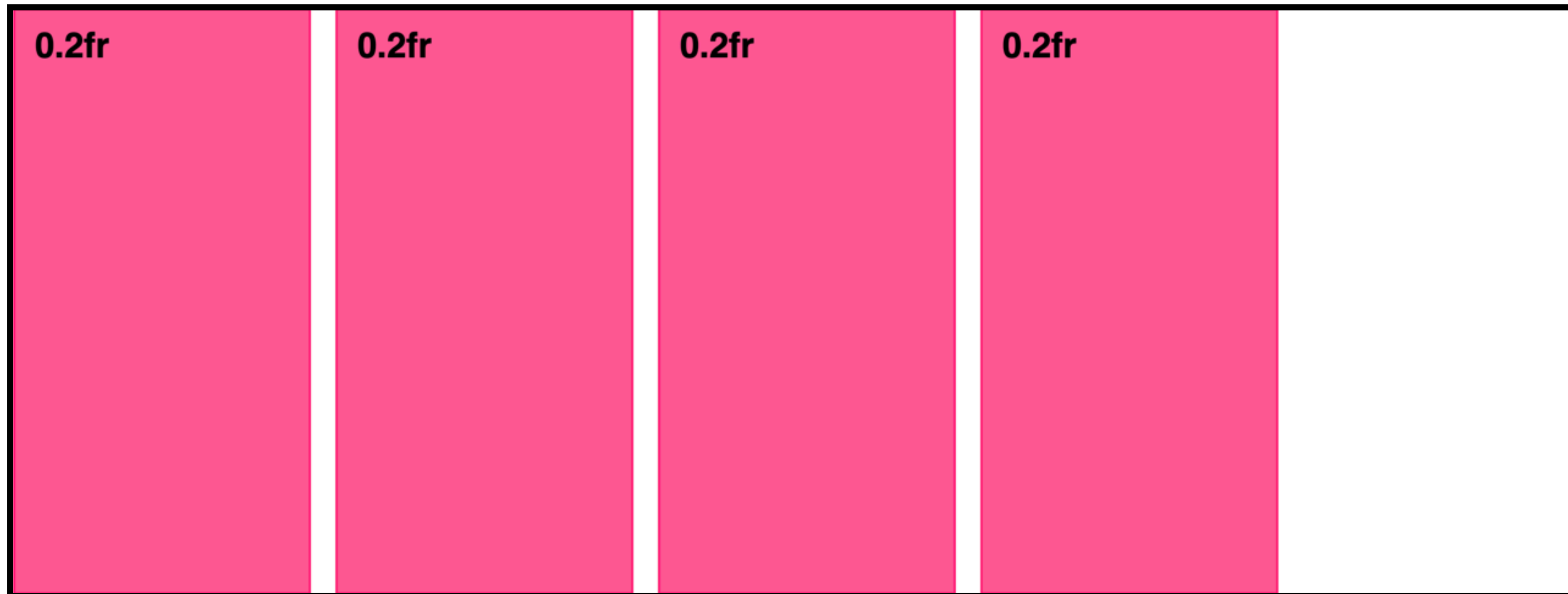
```
grid-template-columns: repeat(4, 1fr);
```

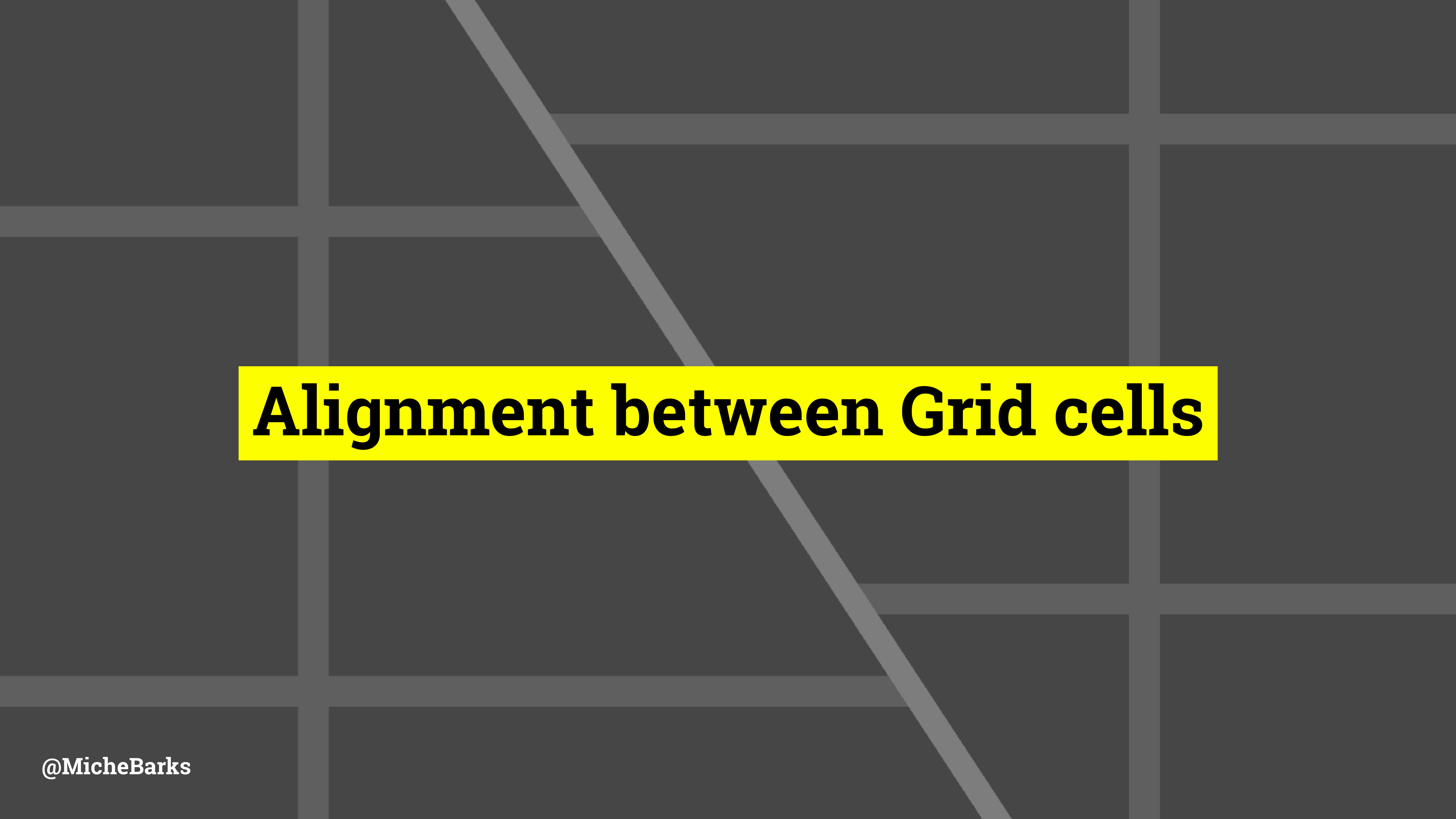


```
grid-template-columns: repeat(4, 0.5fr);
```



```
grid-template-columns: repeat(4, 0.2fr);
```





Alignment between Grid cells

Align-items

Align-content

Justify-items

Justify-content

Align-self

Justify-self

Oat cake halvah toffee marshmallow	Chocolate bar dessert powder gingerbread	Powder muffin bonbon
Carrot cake powder pastry	Powder apple pie jelly beans	Candy sweet roll caramels lemon drops
Caramels caramels cupcake biscuit jelly-o candy canes	Gummies gummi bears muffin	Topping cotton candy dessert

`align-items: center;`

Oat cake halvah toffee marshmallow	Chocolate bar dessert powder gingerbread	Powder muffin bonbon
Carrot cake powder pastry	Powder apple pie jelly beans	Candy sweet roll caramels lemon drops
Caramels caramels cupcake biscuit jelly-o candy canes	Gummies gummi bears muffin	Topping cotton candy dessert

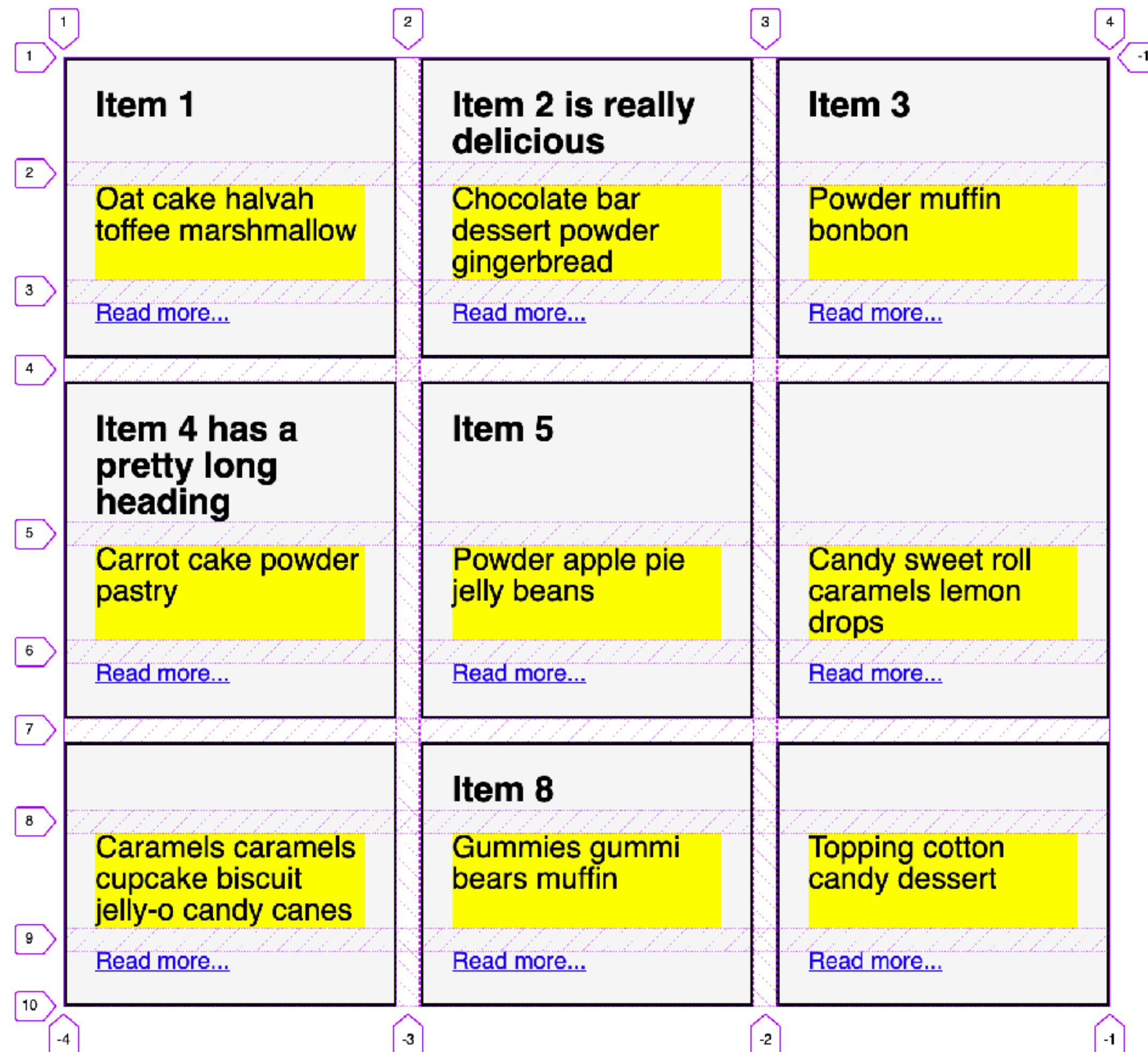
```
display: grid;
```

Oat cake halvah toffee marshmallow Read more...	Chocolate bar dessert powder gingerbread Read more...	Powder muffin bonbon Read more...
Carrot cake powder pastry Read more...	Powder apple pie jelly beans Read more...	Candy sweet roll caramels lemon drops Read more...
Caramels caramels cupcake biscuit jelly-o candy canes Read more...	Gummies gummi bears muffin Read more...	Topping cotton candy dessert Read more...

```
display: flex;
```

Item 1 Oat cake halvah toffee marshmallow Read more...	Item 2 is really delicious Chocolate bar dessert powder gingerbread Read more...	Item 3 Powder muffin bonbon Read more...
Item 4 has a pretty long heading Carrot cake powder pastry Read more...	Item 5 Powder apple pie jelly beans Read more...	Candy sweet roll caramels lemon drops Read more...
Caramels caramels cupcake biscuit jelly-o candy canes Read more...	Item 8 Gummies gummi bears muffin Read more...	Topping cotton candy dessert Read more...

1	1	2	3	4	-1
	Item 1	Item 2 is really delicious	Item 3		
2	Oat cake halvah toffee marshmallow	Chocolate bar dessert powder gingerbread	Powder muffin bonbon		
3	Read more...	Read more...	Read more...		
4					
	Item 4 has a pretty long heading	Item 5			
5	Carrot cake powder pastry	Powder apple pie jelly beans	Candy sweet roll caramels lemon drops		
6	Read more...	Read more...	Read more...		
7					
8		Item 8			
	Caramels caramels cupcake biscuit jelly-o candy canes	Gummies gummi bears muffin	Topping cotton candy dessert		
9	Read more...	Read more...	Read more...		
10					
-4	-3	-2	-1		



```
.grid {
  display: grid;
  grid-template-columns:
    repeat(3, 1fr);
  gap: 1rem;
}

.item {
  grid-row: span 3;
  display: grid;
  grid-template-rows: subgrid;
}
```

When not to use Grid



Tables



```
table {  
  display: grid;  
}
```



```
tr {  
  display: grid;  
}
```



**When you don't want items to
align in rows or columns**

Flexbox

Oat cake halvah toffee marshmallow

Chocolate bar dessert powder gingerbread

Powder muffin bonbon

Carrot cake powder pastry

Powder apple pie jelly beans

Candy sweet roll caramels lemon drops

Caramels caramels cupcake biscuit

Grid

Oat cake halvah toffee marshmallow

Chocolate bar dessert powder
gingerbread

Powder muffin bonbon

Carrot cake powder pastry

Powder apple pie jelly beans

Candy sweet roll caramels lemon
drops

Caramels caramels cupcake biscuit



**When your fallback layout takes
twice as long**

This won't work in IE11

```
.grid {  
  display: grid;  
  grid-template-columns: repeat(3, 1fr);  
}  
  
@supports not (display: grid) {  
  .grid {  
    display: flex;  
    flex-wrap: wrap;  
  }  
}
```

This will work

```
.grid {  
  display: flex;  
  flex-wrap: wrap;  
}  
  
@supports (display: grid) {  
  .grid {  
    display: grid;  
    grid-template-columns: repeat(3, 1fr);  
  }  
}
```

CSS { In Real Life }

css-irl.info

@MicheBarks