SO YOUR DESIGNER WANTS A MASTHEAD...

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LOOKS FAMILIAR?

Some (hopefully) relevant text

Be thankful they didn’t ask for a carousel

Probably some more marketing copy for each of the 3 images above that will only get passed to you after you’ve built most of site, which is never the length of the lorem ipsum your designer used and hence he/she will ask you how come the columns cannot be the same height.
THE BOX MODEL

The model is made up of four boxes, from inside to outside:

- Content
- Padding
- Border
- Margin

The box model, visualised
GET IMAGE RATIO

Ratio = Height / Width
1057 / 2560 = 0.41289 or 41.289%
SCENARIO #1

Designer wants the masthead to maintain its aspect ratio regardless of screen size.
OPTION 1: USE PADDING BOTTOM

```css
div {
    background-size: contain;
    padding-bottom: 41.289%;
}
```

contain tells the browser to always show the entire image, even if it means there is empty space left in the container.

padding-bottom value gives the container a height corresponding to the image ratio.
OPTION 2: USE VIEWPORT UNITS

div {
    background-size: cover;
    height: 41.289vw;
}

cover tells the browser to always cover the entire container, even if the sides have to be cut off.

height value gives the container a height corresponding to the image ratio, because of the relative unit viewport width.
OPTION 3: DO NOTHING

```css
img {
    max-width: 100%;
}
```

If you use a content image, you don't need anything.

Maybe not entirely nothing. `max-width: 100%` makes sure the image doesn't overflow the container.

May occur if you're working with a CMS.
SCENARIO #2

Designer wants the masthead to have a minimum height (otherwise the magnificent image's focal point will end up too tiny to make sense).
OPTION 1: ADJUST WITH BACKGROUND-POSITION

div {
  background-size: cover;
  background-position: 75% 10%;
  min-height: 480px;
}

For background images applied on a container, just use **cover**.

Control the position of the "crop" based on percentage values along the x-axis and y-axis respectively.
OPTION 2: USE OBJECT-FIT

```css
img {
  width: 100%;
  min-height: 480px;
  object-fit: cover;
  object-position: 75% 10%;
}
```

object-fit: cover behaves similarly to
background-size: cover.

object-position behaves similarly to
background-position.

Again, may be relevant if you're working with a CMS.
HOW ABOUT TEXT?

If it was up to me...

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**USE** POSITION: ABSOLUTE;

This removes the text from the normal document flow, so all the previous examples will work fine. Just remember to set the `position: relative` property on the parent container.
USE `calc()`

If your text is within the normal document flow, it takes up space in the `div`.

This extra space needs to be offset, using `calc()` is a good option.

```css
h1 {
  font-size: 5em;
}

.background {
  background-size: cover;
  height: calc(41.289vw - 5em);
}
```

Need to also account for margins and padding, if any.
TO FIND OUT MORE...

- Scaling background images
- background-position on MDN
- object-fit on MDN
- object-fit on CSS-Tricks
- object-position on MDN
THE END

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