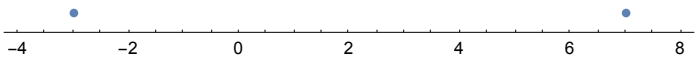
Figures for number line and 1D vector analogy that I used to motivate the contraction axiom. I ended up pulling that motivation attempt from the book, as I wasn't sure I explained my thoughts well.

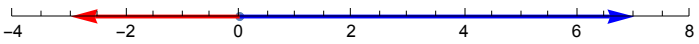
```
<< peeters` ;
peeters`setGitDir[ "../project/GAelectrodynamics-figures" ]
```

```
p1 = -3;
p2 = 7;
o = {0, 0};
a1 = {p1, 0};
a2 = {p2, 0};

n = NumberLinePlot[{p1, p2}]
pts = ListPlot[{o(*,a1,a2*)},
   PlotRange → {{-4, 8}, {-1, 1}}, Axes → {Automatic, None}];
arrows = Graphics[{Thick,
    Red, Arrow[{o, a1}],
    Blue, Arrow[{o, a2}]}
  ];

s = Show[pts, arrows]
peeters`exportForLatex["1DnumberlineFig1", n]
peeters`exportForLatex["1DarrowsFig2", s]
```






```
{1DnumberlineFig1.eps, 1DnumberlineFig1pn.png}
```

```
{1DarrowsFig2.eps, 1DarrowsFig2pn.png}
```

```
Directory[]
```

```
/Users/pjoot/project/GAelectrodynamics-figures
```