Math test 2019, part 1

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Exercise 1a

$$292.32m \cdot 72 = ?\ dm$$

Solution 1a:

$$\begin{aligned} 292.32m \cdot 72 = \\ 292.32 \cdot 1m \cdot 72 = \\ 292.32 \cdot 10dm \cdot 72 = \\ 2923.2dm \cdot 72 = \\ 2923.2 \cdot 72dm = \\ \{\text{calculate...}\} = \\ 210470.4dm \end{aligned}$$

```
_1a_dm_number = 210470.4
```

Exercise 1b

$$16208 + q = 35692 - 7012$$

Solution 1b:

$$\begin{aligned} 16208 + q &= 35692 - 7012 \\ q + 16208 &= 35692 - 7012 \\ q + 16208 - 16208 &= 35692 - 7012 - 16208 \\ q &= 35692 - 7012 - 16208 \\ q &= \{\text{calculate...}\} = 12472 \end{aligned}$$

Exercise 1c

$$64\frac{9}{10}kg : 40g =$$

Solution 1c:

$$\begin{aligned} 64\frac{9}{10}kg : 40g &= \\ 64.9kg : 40g &= \\ 64.9 \cdot 1kg : 40g &= \\ 64.9 \cdot 1000g : 40g &= \\ 64900g : 40g &= \\ 64900 : 40 \cdot \frac{\cancel{g}}{\cancel{g}} &= \\ \frac{64900}{40} &= \\ \frac{6490}{4} &= \\ \frac{3245}{2} &= \\ 1622.5 & \end{aligned}$$

Exercise 2

Convert 23.7 minutes into seconds

Solution 2:

$$\begin{aligned} 23.7min = \\ 23.7 \cdot 1min = \\ 23.7 \cdot 60s = \\ 23.7 \cdot 60 \cdot s = \\ 237 \cdot 6 \cdot s = \\ \{\text{calculate...}\} = \\ 1422s \end{aligned}$$

Exercise 4

```
PlotlyBackend()
```

$$7 \cdot ((48.3 - x) \cdot 2) = 161$$

Change x by moving the slider

31.9

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x is now: 31.9
```

```
lhs_function (generic function with 1 method)
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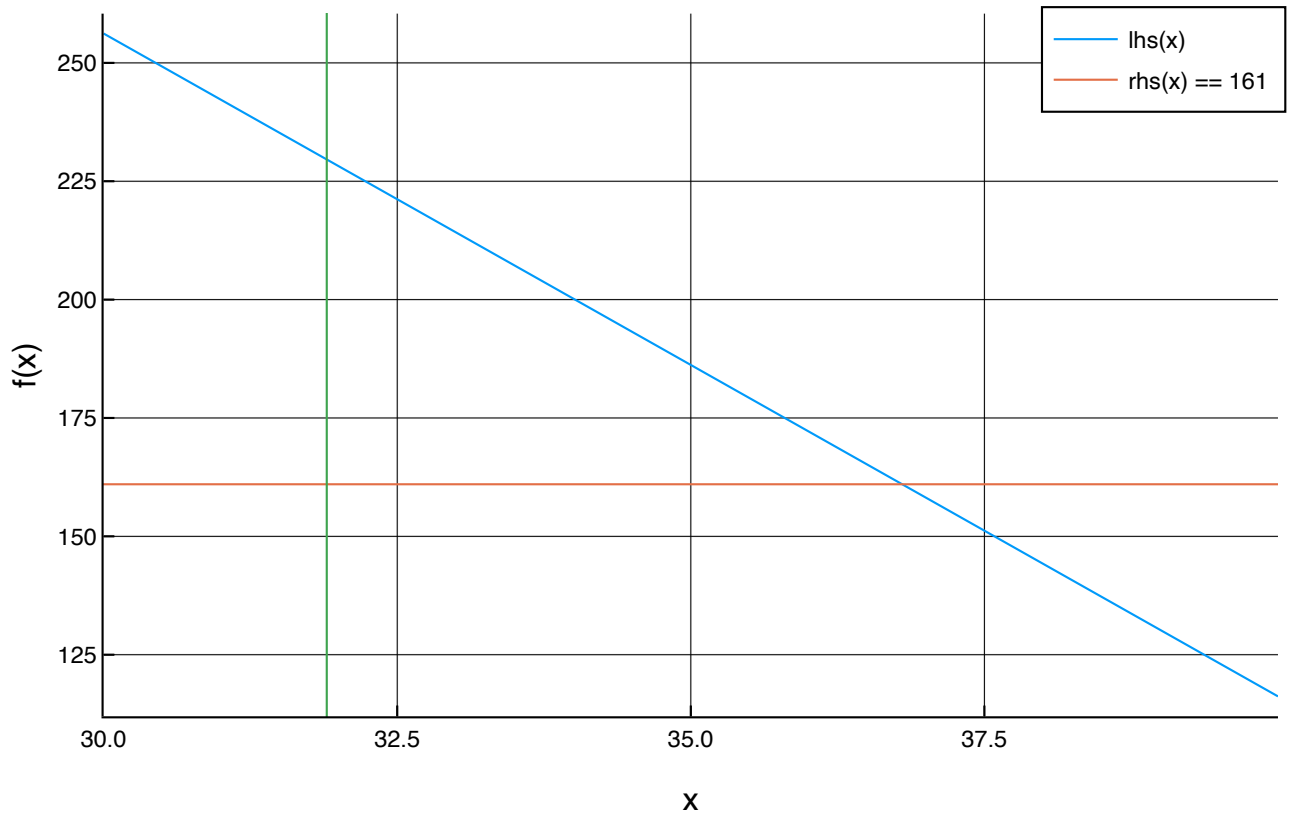
The left hand side is: 229.59999999999997
The right hand side is: 161
```



my_latex_string =

$$x_0$$

LaTeXString