

Stundenlohn

Dokumentnummer: D1061
 Fachgebiet: Gleichungssysteme,
 Wirtschaftsrechnen
 Einsatz: 2HAK (erstes Lernjahr)



1 Problembeschreibung

 Quelle: <http://www.edhelper.com>

The hourly wages of Megan and Jasmine are in the ratio of 18:19.
 Today, they each worked six hours.
 Jasmine earned \$4.32 more than Megan for today's work.
 How much does Jasmine earn per hour?

2 Problemlösung

```
(%i1) kill(all);
(%o0) done
```

2.1 Verarbeitung

```
(%i1) g1:m/j=18/19;
(%o1)  $\frac{m}{j} = \frac{18}{19}$ 
```

```
(%i2) g2:6*j-4.32=6*m;
(%o2)  $6j - 4.32 = 6m$ 
```

```
(%i3) l:solve([g1,g2],[m,j]);
rat: replaced -4.32 by -108/25 = -4.32
(%o3)  $\left[ \left[ m = \frac{324}{25}, j = \frac{342}{25} \right] \right]$ 
```

```
(%i4) l:l, numer;
(%o4)  $\left[ \left[ m = 12.96, j = 13.68 \right] \right]$ 
```

```
(%i5) m:m,l[1][1];
(%o5) 12.96
```

```
(%i6) j:ev(j,l[1][2]);
(%o6) 13.68
```

2.2 Ausgabe

```
(%i7) print("")$
      print("Der Stundenlohn von Jasmin ist ",j)$
```

Der Stundenlohn von Jasmin ist 13.68