

2-3**Real-Life Career Activity****Temporary Employment Agency Manager**

A temporary employment agency helps companies find workers for short-term jobs. It also helps workers find temporary employment. Companies use temporary workers to replace permanent staff who are out of the office because of illness or vacation. They also use temporary staff during periods of extra work. For example, mail-order companies use extra staff during the holiday season when they have more orders to fill.



The temporary agency manager is responsible for understanding the qualifications a company looks for in a temporary worker. The agency manager then chooses a person who fits the needs of the company.

Temporary workers usually work only fractions of days or weeks. The temporary agency manager can use the formula below to calculate the daily or weekly wages of a temporary worker.

$$w = h \cdot r$$

In this formula, w is the weekly or daily wages, h is the number of hours worked, and r is the hourly rate of pay.

Suppose a temporary works $14\frac{1}{2}$ hours and earns \$8.50 per hour. What is the wage of the temporary worker before taxes are deducted?

$$\begin{aligned} w &= 14\frac{1}{2} \cdot 8.5 & w &= 14\frac{1}{2} \cdot 8.5 \\ &= 14.5 \cdot 8.5 & \text{or} & = 14\frac{1}{2} \cdot 8\frac{1}{2} \\ &= 123.25 & & = \frac{29}{2} \cdot \frac{17}{2} \\ & & & = \frac{493}{4} = 123.25 \end{aligned}$$

The agency should pay the temporary worker \$123.25 before taxes.

Solve.

1. Calculate how much an agency should pay a temporary employee who works $27\frac{1}{2}$ hours and earns \$9.50 per hour.
2. Calculate how much an agency should pay a temporary employee who works $37\frac{1}{2}$ hours and earns \$11.50 per hour.
3. A temporary employee who works $15\frac{1}{2}$ hours earns \$162.75. Calculate the temporary's hourly rate.