Study Tip

Notice the similarity between these formulas and the ones for distance, rate, and time.

Formulas for Earnings, Rate, and Time

Earnings $= E$	Rate $= r$	Time $= t$
$E = rt$	$r = \frac{E}{t}$	$t = \frac{E}{r}$
Earnings equal rate times time.	Rate equals earnings divided by time.	Time equals earnings divided by rate.

Math.andYOU.com

You can access an earnings, rate, and time calculator at *Math.andYou.com*.

EXAMPLE 6 Comparing Job Offers

Which job offer has the better total compensation? Explain your reasoning.

a.

Salary Rate:	\$30 per hour
401(k):	5% matching
Health Insurance:	\$600 per month

b.

Salary Rate:	\$59,000 per year
401(k):	6% matching
Health Insurance:	\$900 per month
Profit Sharing:	\$0–\$20,000 per year

SOLUTION

a. There are 52 weeks in a year. At 40 hours a week, you work 2080 hours in a year. Your yearly earnings are

$$E = \left(30 \frac{\$}{\cancel{\text{hr}}}\right)(2080 \cancel{\text{hr}}) = \$62{,}400.$$

5% of this is \$3120 (see Section 1.3). So, your total compensation is

$$62{,}400 + 3120 + 12(600) = \$72{,}720.$$

b. 6% of \$59,000 is \$3540 (see Section 1.3). Your total compensation is

$$59{,}000 + 3540 + 12(900) = \$73{,}340.$$

So, even without profit sharing, this total compensation is better. If the company has a profitable year, the total compensation could be *much* better.

Checkpoint Help at Math.andYOU.com

c. You get a third job offer. How does it compare with the other two offers?

Salary Rate:	\$4800 per month
401(k):	4% matching
Health Insurance:	\$1200 per month
Sales Commission:	\$0–\$3000 per month