

**Example 3**

Sebastian would like to purchase a house. The monthly payment for the house will be \$1280. Sebastian's gross annual income is \$45 900. The annual property taxes on the house cost \$2530. The house's average monthly heating cost is \$190. Calculate Sebastian's GDSR and determine if the bank will be likely to grant Sebastian a mortgage for this house.

$$\begin{aligned} \text{monthly gross income} &= \$45\,900 \div 12 \text{ (months)} \\ &= \$3\,825 \end{aligned}$$

$$\text{monthly property tax} = 2530 \div 12 = \$210.83$$

$$\begin{aligned} \text{GDSR} &= \frac{1280 + 210.83 + 190}{3\,825} \times 100 \\ &= 43.94\% \end{aligned}$$

The bank is not likely to grant Sebastian a mortgage.

**Using the Recommended GDSR to Determine Maximum Monthly Payment****Example 4**

Suppose you have a gross monthly income of \$3400.00. You wish to purchase a property that has monthly taxes listed at \$185.00 and monthly heating listed at \$175.00. What is the maximum monthly mortgage payment you can afford?

NOTE: The GDSR must be 32% or less.

$$\frac{\text{mortgage payment} + \text{property tax} + \text{heating}}{\text{income}} \times 100 = 32$$

$$\frac{x + 185 + 175}{3400} \times 100 = 32$$

$$(x + 185 + 175) \times 100 = 32 \times 3400$$

$$(x + 360) \times 100 = 108800$$

$$x + 360 = \frac{108800}{100}$$

$$x = 1088 - 360$$

$$= \$728 \text{ per month} \quad \text{Home Finance}$$