

Interest Calculations Example 2

Principal	\$ 750,000
Annual interest rate	8%
Date borrowed	January 1, 2006

Simple interest method

Year	Principal	Annual interest rate	Interest expense		Cumulative interest	Principal + Cumulative interest
2006	\$ 750,000	8%	\$ 60,000	(*1)	\$ 60,000	\$ 810,000
2007	\$ 750,000	8%	\$ 60,000	(*1)	\$ 120,000	\$ 870,000
2008	\$ 750,000	8%	\$ 60,000	(*1)	\$ 180,000	\$ 930,000
2009	\$ 750,000	8%	\$ 60,000	(*1)	\$ 240,000	\$ 990,000
2010	\$ 750,000	8%	\$ 60,000	(*1)	\$ 300,000	\$ 1,050,000

(*1) $\$750,000 \times 8\% = \$60,000$

Compound interest method

Year	Principal	Annual interest rate	Interest expense		Cumulative interest	Principal + Cumulative interest
2006	\$ 750,000	8%	\$ 60,000	(*2)	\$ 60,000	\$ 810,000
2007	\$ 750,000	8%	\$ 64,800	(*3)	\$ 124,800	\$ 874,800
2008	\$ 750,000	8%	\$ 69,984	(*4)	\$ 194,784	\$ 944,784
2009	\$ 750,000	8%	\$ 75,583	(*5)	\$ 270,367	\$ 1,020,367
2010	\$ 750,000	8%	\$ 81,629	(*6)	\$ 351,996	\$ 1,101,996

(*2) $\$750,000 \times 8\% = \$60,000$

(*3) $(\$750,000 + \$60,000) \times 8\% = \$64,800$

(*4) $(\$750,000 + \$60,000 + \$64,800) \times 8\% = \$69,984$

(*5) $(\$750,000 + \$60,000 + \$64,800 + \$69,984) \times 8\% = \$75,583$

(*6) $(\$750,000 + \$60,000 + \$64,800 + \$69,984 + \$75,583) \times 8\% = \$81,629$