

Interest Calculations Example 2a

Principal	\$ 750,000
Annual interest rate	8%

Date borrowed **October 1, 2006**

Simple interest method

Year	Principal	Annual interest rate	No. of months	Interest expense		Cumulative interest	Principal + Cumulative interest
2006	\$ 750,000	8%	3	\$ 15,000	(*1)	\$ 15,000	\$ 765,000
2007	\$ 750,000	8%	12	\$ 60,000	(*2)	\$ 75,000	\$ 825,000
2008	\$ 750,000	8%	12	\$ 60,000	(*2)	\$ 135,000	\$ 885,000
2009	\$ 750,000	8%	12	\$ 60,000	(*2)	\$ 195,000	\$ 945,000
2010	\$ 750,000	8%	12	\$ 60,000	(*2)	\$ 255,000	\$ 1,005,000

(*1) $\$750,000 \times 8\% \times (3/12) = \$15,000$

(*2) $\$750,000 \times 8\% \times (12/12) = \$60,000$

Compound interest method

Year	Principal	Annual interest rate	No. of months	Interest expense		Cumulative interest	Principal + Cumulative interest
2006	\$ 750,000	8%	3	\$ 15,000	(*3)	\$ 15,000	\$ 765,000
2007	\$ 750,000	8%	12	\$ 61,200	(*4)	\$ 76,200	\$ 826,200
2008	\$ 750,000	8%	12	\$ 66,096	(*5)	\$ 142,296	\$ 892,296
2009	\$ 750,000	8%	12	\$ 71,384	(*6)	\$ 213,680	\$ 963,680
2010	\$ 750,000	8%	12	\$ 77,094	(*7)	\$ 290,774	\$ 1,040,774

(*3) $\$750,000 \times 8\% \times (3/12) = \$15,000$

(*4) $(\$750,000 + \$15,000) \times 8\% \times (12/12) = \$61,200$

(*5) $(\$750,000 + \$15,000 + \$61,200) \times 8\% \times (12/12) = \$66,096$

(*6) $(\$750,000 + \$15,000 + \$61,200 + \$66,096) \times 8\% \times (12/12) = \$71,384$

(*7) $(\$750,000 + \$15,000 + \$61,200 + \$66,096 + \$71,384) \times 8\% \times (12/12) = \$77,094$