Interest Calculations Example 1

Principal	$ 200,000
Annual interest rate	10%
Date borrowed	January 1, 2006

Simple interest method

Year	Principal	Annual interest rate	Interest expense		Cumluative interest	Principal + Cumulative interest
2006	$ 200,000	10%	$ 20,000	(*1)	$ 20,000	$ 220,000
2007	$ 200,000	10%	$ 20,000	(*1)	$ 40,000	$ 240,000
2008	$ 200,000	10%	$ 20,000	(*1)	$ 60,000	$ 260,000
2009	$ 200,000	10%	$ 20,000	(*1)	$ 80,000	$ 280,000
2010	$ 200,000	10%	$ 20,000	(*1)	$ 100,000	$ 300,000

(*1) $200,000 x 10% = $20,000

Compound interest method

Year	Principal	Annual interest rate	Interest expense		Cumluative interest	Principal + Cumulative interest
2006	$ 200,000	10%	$ 20,000	(*2)	$ 20,000	$ 220,000
2007	$ 200,000	10%	$ 22,000	(*3)	$ 42,000	$ 242,000
2008	$ 200,000	10%	$ 24,200	(*4)	$ 66,200	$ 266,200
2009	$ 200,000	10%	$ 26,620	(*5)	$ 92,820	$ 292,820
2010	$ 200,000	10%	$ 29,282	(*6)	$ 122,102	$ 322,102

(*2) $200,000 x 10% = $20,000
(*3) ($200,000 + $20,000) x 10% = $22,000
(*4) ($200,000 + $20,000 + $22,000) x 10% = $24,200
(*5) ($200,000 + $20,000 + $22,000 + $24,200) x 10% = $26,620
(*6) ($200,000 + $20,000 + $22,000 + $24,200 + $26,620) x 10% = $29,282