

**Geometry, Measurement and Finance 10**  
**Worksheet - Compound Interest**

1. Complete the following chart:

Principal	Rate/a	Time	Compounded	Formula	Amount	Interest
\$1200	12%	5 a	Semi-annually	$A = 1200 \left(1 + \frac{0.12}{2}\right)^{10}$	\$2149.02	\$949.02
\$480	6%	3 a	Quarterly			
\$10000	8%	12 a	Annually			
\$5600	$7\frac{1}{4}\%$	10 a	Semi-annually			
\$80	$10\frac{1}{2}\%$	20 a	Monthly			
\$1 200 000	5%	7 a	Quarterly			

2. Examine how varying interest rates and compounding intervals affects the following investment.

Principal	Rate/a	Time	Compounded	Formula	Amount	Interest
\$12 000	8%	15 a	Annually			
\$12 000	8%	15 a	Semi-Annually			
\$12 000	8%	15 a	Quarterly			
\$12 000	8%	15 a	Monthly			
\$12 000	8%	15 a	Daily			
\$12 000	8%	15 a	Simple Interest			

3. Which of the following investments would be worth the most money after 20 years?

\$5000 at 8%/a compounded semi-annually	\$7000 at 6%/a compounded daily	\$17000 at 2%/a compounded monthly