

Samples **Continuous compounding**

1. Before Damien can marry Celeste, he must prove to her father that he can save the deposit for a house. He has \$800 to invest, his account pays 6.0 percent interest per annum, compounding continuously, and he needs to have a total of \$1920 before he can get married. He is currently 19 years old. At what age can he get married?
2. Before Damien can marry Celeste, he must prove to her father that he can save the deposit for a house. He has \$800 to invest, his account pays 5.0 percent interest per annum, compounding continuously, and he needs to have a total of \$2080 before he can get married. He is currently 17 years old. At what age can he get married?
3. Before Damien can marry Celeste, he must prove to her father that he can save the deposit for a house. He has \$1000 to invest, his account pays 6.0 percent interest per annum, compounding continuously, and he needs to have a total of \$1900 before he can get married. He is currently 13 years old. At what age can he get married?