

T

h

e

F



r

m

u



a







a





u



a



e

C



m

p



u

n

d



n



e

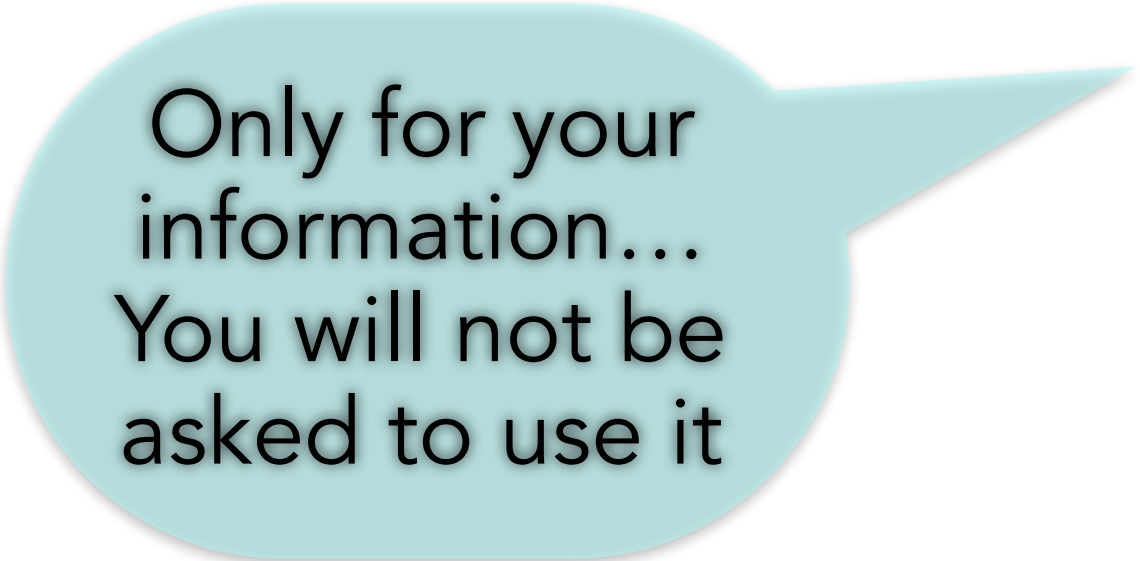
r

e

S







Only for your
information...
You will not be
asked to use it

A

[REDACTED]

[REDACTED]

P





















[REDACTED]

[REDACTED]

A

nn



u





a

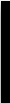




U

m

U



2







2















P

[REDACTED]

[REDACTED]



m



u





2









b















9



[REDACTED]

[REDACTED]













S





2











mm

2











U

m

b













m



S











S





S





m





U

















nn

















[REDACTED]

[REDACTED]



U

m

b













m















S







m





Y



S









2





















S



Example: If you save \$1,000 at 7% per year compounded
yearly for 10 years

A = Amount accumulated at the end

$P = \$1,000$

$r = 0.07$

$n = 1$

$t = 10$

Example: If you save \$1,000 at 7% per year compounded
monthly for 10 years

A = Amount accumulated at the end

$P = \$1,000$

$r = 0.07$

$n = 12$

$t = 10$

The Formula to Calculate Compound
Interest:

$$A \equiv P(1 + r/n)^{nt}$$

A = Amount accumulated at the end

P = Amount at the beginning

$r = \text{interest rate (decimal)}$

$n =$ number of times interest is compounded per time period

t = number of time periods the money is kept earning interest

The Formula to Calculate Compound

$$\text{Interest: } A = P(1 + r/n)^{nt}$$

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A = Amount accumulated at the end

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Example: If you save \$1,000 at 7% per year compounded
monthly for 10 years

A = Amount accumulated at the end

P = \$1,000

r = 0.07

n = 12

t = 10

The Rule of 70