Name: Veronica Picillo Date: Jan 10, 2020

Daily Check In

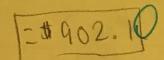$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$A = P + I$$

$\frac{4.5}{5}$

Anne has $12 500 saved for a trip to Europe. She invested this at an annual rate of 4.65%, compounded semi-monthly, for a year and a half. How much interest did Anne make on her Europe fund at the end of the term?

A	
P	12 500 ✓
I	
r	0.0465 ✓
t	1.5
n	24

$$A = 12\,500\left(1 + \frac{0.0465}{24}\right)^{24 \times 1.5}$$

$$A = 12\,500\left(1 + 0.0019375\right)^{36}$$

$$A = 12\,500\left(1.0019375\right)^{36} ✓$$

$$A = 12\,500\left(1.072167732\right)$$

$$A = \$13402.40 ✓$$

$13,402.10 - 12\,500$

$= \$902.10$

2 decimal places for money!

How did you do? (Circle one)	Emerging	Developing	Proficient	Extending
	😱	😐	🙂	😀

Name: __Connor Phan__   Date: _____

Daily Check In $\dfrac{5}{5}$ ☺

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$A = P + I$$

Anne has $13 750 saved for a trip to Europe. She invested this at an annual rate of 5.05%, compounded bi-weekly, for a year and a half. How much interest did Anne make on her Europe fund at the end of the term?

A	14830.75
P	13750 ✓
I	1080.75
r	5.05% ✓
t	1.5 ✓
n	26 ✓

$A = 13750 \left(1 + \dfrac{0.0505}{26}\right)^{26 \times 1.5}$

$A = 13750 \left(1 + \dfrac{0.0505}{26}\right)^{39}$

$A = 13750 \left(1 + 0.001942\right)^{39}$

$A = 13750 \left(1.001942\right)^{39}$

$A = 13750 \left(1.0786\right)$

$A = \$14830.75$ ✓

$I = 14830.75 - 13750$

$I = 1080.75$ ✓

Fantastic!

How did you do? (Circle one)	Emerging	Developing	Proficient	Extending
	😱	😐	☺	😄 (circled)

Name: _____   Date: _____

A payday loan is

A loan intended to be paid back by your next
pay day.

They are different from all other types of loans we will talk about because:

- Simple interest or compounded daily.
- Often a flat fee for the first 2 weeks.

Predatory Lending (John Oliver)

1. What was the most surprising fact you heard? Why did you find it surprising?

2. How are these kinds of companies getting away with charging such high interest rates?

$$I = Prt$$

$$\frac{I}{P \mid r \mid t}$$

Example Hayley borrowed $325.00 from a payday store, and 10 days later she paid back the loan and interest with a cheque for $365.50.

$$I = 365.50 - 325 = 40.50$$

a) What was Hayley's daily interest rate?

$$r = \frac{I}{Pt} = \frac{40.50}{(325)(10)}$$

$$= 0.01246$$

$$= 1.25\% \text{ per day}$$

Assignment   Finish This Handout!   Quiz: Next Day!

b) What was Hayley's annual interest rate?

$$1.25\% \times 365 = 455\% \text{ annually.}$$

1. Anne borrowed $250.00 from a payday loan store. She paid back the loan and interest 9 days later. Her annual rate of interest was 425%. How much interest did Anne pay?

$$I = Prt$$

because this is annual

$$= (250)(4.25)\left(\frac{9}{365}\right)$$

this has to be in years.

$$= \$26.20$$

2. Mike borrowed $725.00 from a payday loan store and agreed to repay it in 15 days at a daily interest rate of 1.67%. How much in total did Mike repay the store? **A**

P

t

$$I = Prt \qquad r$$
$$A = P + I$$

$$I = Prt$$
$$= (725)(0.0167)(15)$$
$$= 181.61$$

$$A = P + I$$
$$= 725 + 181.61 = \$906.61$$

3. Luke agreed to pay $527.50 to a payday company that gave him a loan of $485.00 at 1.10% per day. How many days did he have the money?

$$I = 527.50 - 485$$