

WARM UP

1) Principal = \$2,500

interest rate = 7%

time = 10 years

MATH COURSE I

Simple Interest
(2)

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VOCABULARY

interest: the amount of money charged for borrowing or using money

simple interest: a fixed percentage of the principal $I = prt$

principal: the initial/original amount of money borrowed or saved

FORMULA

$$I = prt$$

p = principal

r = rate of interest

t = time

SIMPLE INTEREST

I = \$204, P = \$1,700, r = ?, t = 6 years

* Use a calculator

$$I = Prt$$

$$\$204 = \$1,700 \times r \times 6$$

$$\$204 = 10,200 \times r$$

$$\$204/10,200 = r$$

$$r = 0.02 = 2\%$$

PRACTICE

$I = \$600, P = \$2,000, r = ?, t = 3 \text{ years}$

PRACTICE

1) $I = ?$, $P = \$750$, $r = 4\%$, $t = 3$ years

2) $I = 120$, $P = ?$, $r = 3\%$, $t = 5$ years

3) $I = \$180$, $P = \$1500$, $r = ?$, $t = 2$ years

MORE PRACTICE

- 1) $I = ?$, $P = \$750$, $r = 4\%$, $t = 6$ months (0.5 years)
- 2) $I = 120$, $P = ?$, $r = 3\%$, $t = 18$ months (1.5 years)
- 3) $I = \$180$, $P = \$1500$, $r = ?$, $t = 2$ years

INTEREST PAID

- Video

P = Principal (amount **barrowed** or amount **deposited**)

1) Joe deposits \$8,000 dollars into a savings account which pays 6% simple interest annually. How long will it be before the total amount in his account is \$10,000?