

7th Grade
Feb 1, 2021

Today we will:

-work alone or in partners to complete simple interest task cards



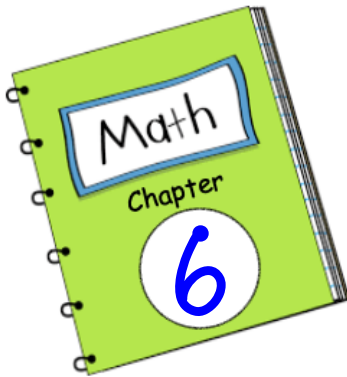
HOMEWORK:

Unit 6 test Fri, Feb 5

Unit 6 Project due
Tues, Feb 9

ALEKS assignment:
60 min and 5 topics
due Monday by
11:59pm





TITLE:



Percents

Date	Lesson	Topic/Assignment
1-4	1	Using Percent Proportion Video Notes
1-5	1	HOMEWORK: HW Prac WS
1-5	1	CLASSWORK: Pg253 WS
1-6	2	Finding Percent Mentally Video Notes
1-7	2	HOMEWORK: Skills WS
1-7	2	CLASSWORK: Extra Practice WS
1-8	2	10% Rule Video Notes
1-11	3	Using Percent Equation Video Notes
1-12	3	HOMEWORK: Magnolia Riddle WS
1-12	3	CLASSWORK: Practice WS 6 Boxes
1-14	1-3	CLASSWORK: Reteach Packet
1-19	5	Discount and Markup Video Notes
1-20	5	CLASSWORK: Pg277 WS
1-25	5	CLASSWORK: Polka Dot Task Cards
1-27	6	Simple Interest Video Notes
1-28	6	HOMEWORK: Pg283 #1-4 and #10-15
1-29	6	HOMEWORK: HW Practice WS
2-1	6	CLASSWORK: Simple Interest Task Cards
2-2	6	Compound Interest Video Notes
2-3	6	HOMEWORK: Pg283 #19-20
2-3	6	CLASSWORK: Pg283 #21-22
2-4	ALL	HOMEWORK: Study Guide

In-class activity: Simple Interest Task Cards

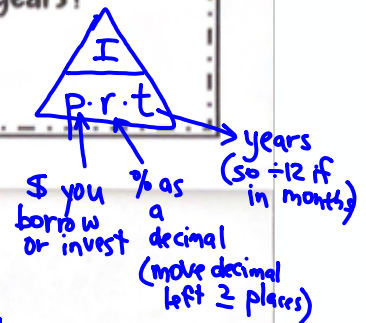
#1

If you borrow \$675 for six years at an interest rate of 10%, how much interest will you pay?

$$\begin{aligned}
 I &= p \cdot r \cdot t \\
 &= 675 \cdot 0.10 \cdot 6 \\
 &= \$405
 \end{aligned}$$

#2

How much interest is earned on \$470 at 4% for 7 years?



$$\begin{aligned}
 I &= p \cdot r \cdot t \\
 &= 470 \cdot 0.04 \cdot 7 \\
 &= \$
 \end{aligned}$$

#3

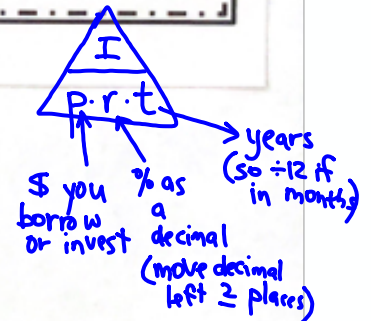
How much interest
does a \$318
investment earn at
9% over one year?

$$\begin{aligned}
 I &= p \cdot r \cdot t \\
 &= 318 \cdot 0.09 \cdot 1 \\
 &= \text{\$}28.62
 \end{aligned}$$

#4

If you borrow \$225 for
eight years at an
interest rate of 6%,
how much interest will
you pay?

$$\begin{aligned}
 I &= p \cdot r \cdot t \\
 &= 225 \cdot 0.06 \cdot 8 \\
 &= \text{\$}108
 \end{aligned}$$



#5

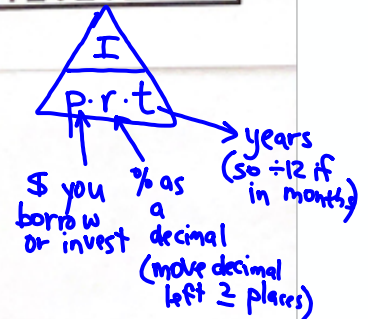
How much interest is earned on a principal of \$646 invested at an interest rate of 5% for 2 years?

$$\begin{aligned}
 I &= p \cdot r \cdot t \\
 &= 646 \cdot 0.05 \cdot 2 \\
 &= \text{\$64.60}
 \end{aligned}$$

#6

If you earned \$200 interest on a loan of \$500 at an interest rate of 2%, how many months was the loan for?

$$\begin{aligned}
 t &= \frac{I}{p \cdot r} \\
 &= \frac{200}{500 \cdot 0.02}
 \end{aligned}$$



$$\begin{aligned}
 &\textcircled{1} 200 \div 500 \div 0.02 : \\
 \text{OR } &\textcircled{2} 200 \div (500 \cdot 0.02) = 20 \text{ yr} \cdot 12 = \text{\textcircled{240 mo}}
 \end{aligned}$$

#7

If you earned \$1000 interest on a loan of \$5200 at a yearly interest rate of 2.5% how many years was the loan for? (Round to the nearest tenth)

2.5%

$$\frac{I}{P \cdot r \cdot t} = \frac{1000}{(5200 \cdot 0.025)}$$

$$\textcircled{1} 1000 \div 5200 \div 0.025 =$$

$$\textcircled{2} 1000 \div (5200 \cdot 0.025) = \boxed{7.7 \text{ years}}$$

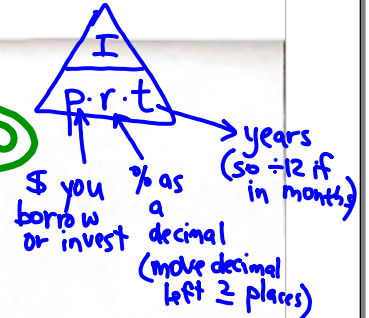
#8

How much was your loan through Capital One if you paid \$1200 in interest at a rate of 1.5% for 5 years?

$$P = \frac{I}{r \cdot t}$$

$$= \frac{1200}{0.015 \cdot 5}$$

$$= \boxed{\$16,000}$$





Compound Interest

To Find Compound Interest:

Use _____ and repeat for the _____.

Find the total amount in the account after 2 years if \$ _____ is invested at 12% compounded annually.

Example 1:

What is the total amount of money after 3 years in an account where \$ _____ is invested at an interest rate of 5% compounded annually?

Example 2:

Find the total amount in the account if interest is compounded each year.

\$14,750 at 5% for two years

Example 3: