HW: Worksheet/7-19, 21

Warm up:

1) What is 14% of 98?

$0.14(98) = 13.72$

2) A store sold 42 books in December. This is 70% of the books that they sold in November. How many books did they sell in November?

$\frac{0.7x}{0.7} = \frac{42}{0.7}$ 60 books

3) Jake scored 24% of the points in the most recent basketball game. If there were a total of 125 points scored in the basketball game, how many did Jake score?

$0.24(125) = 30$ points

HW Solutions

(2) 100°C

$$\frac{100-97.5}{100} = \frac{2.5}{100} = 2.5\%$$

④

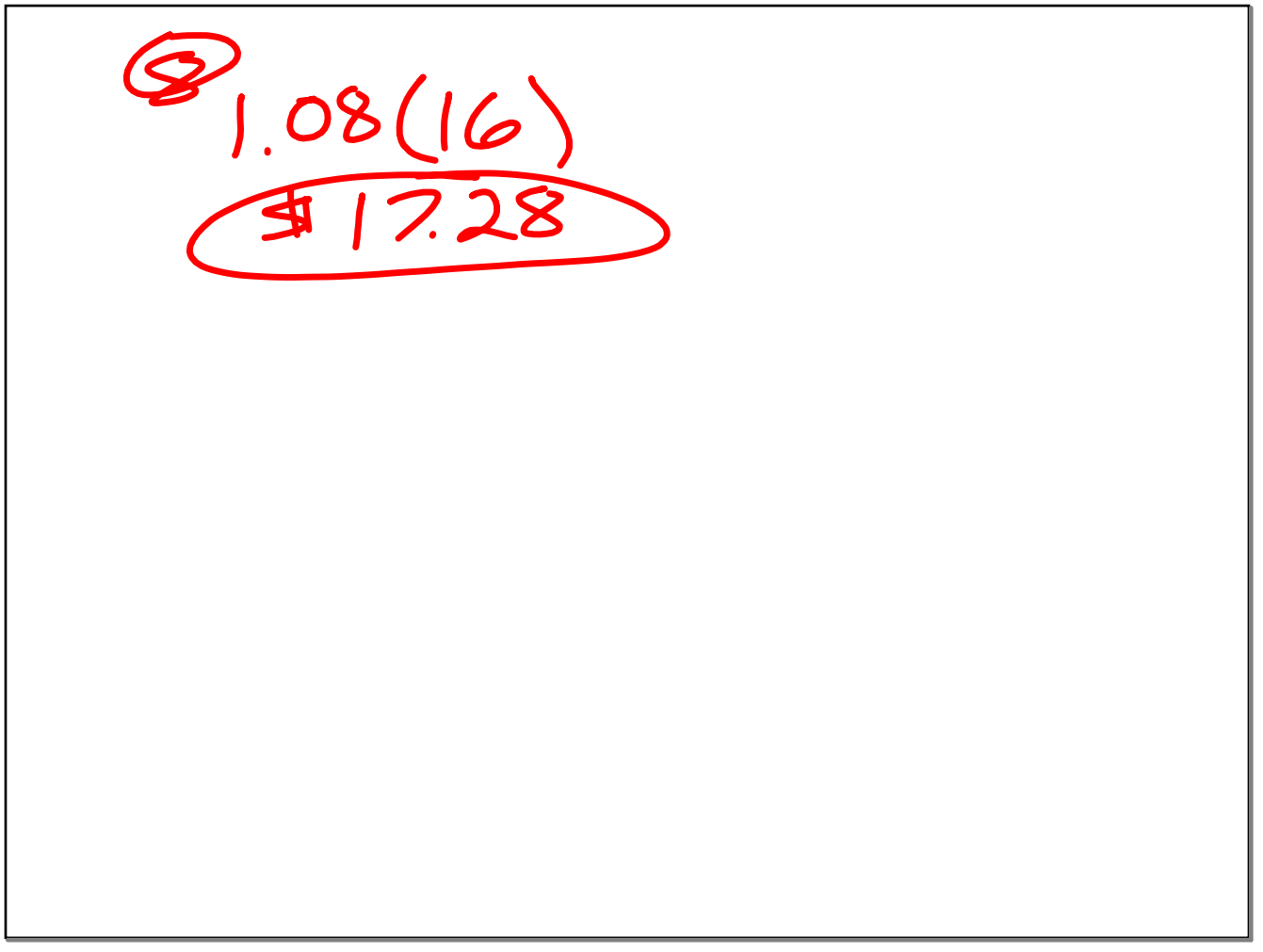
$\frac{1.355x}{1.355} = \frac{15.6}{1.355}$ | $\frac{0.645x}{0.645} = \frac{15.6}{0.645}$

11.5cm or 24.19cm

(12) $\frac{18.84 - 11.52}{11.52} = 0.64$

64%

$\frac{7.32}{11.52}$


1.08(16)
$17.28

(14)

4.75
42
42
88.75
×0.15
13.31

119
8.88
127.88
×0.15
19.18

$$\frac{19.18 - 13.31}{13.31} = 44.1\%$$

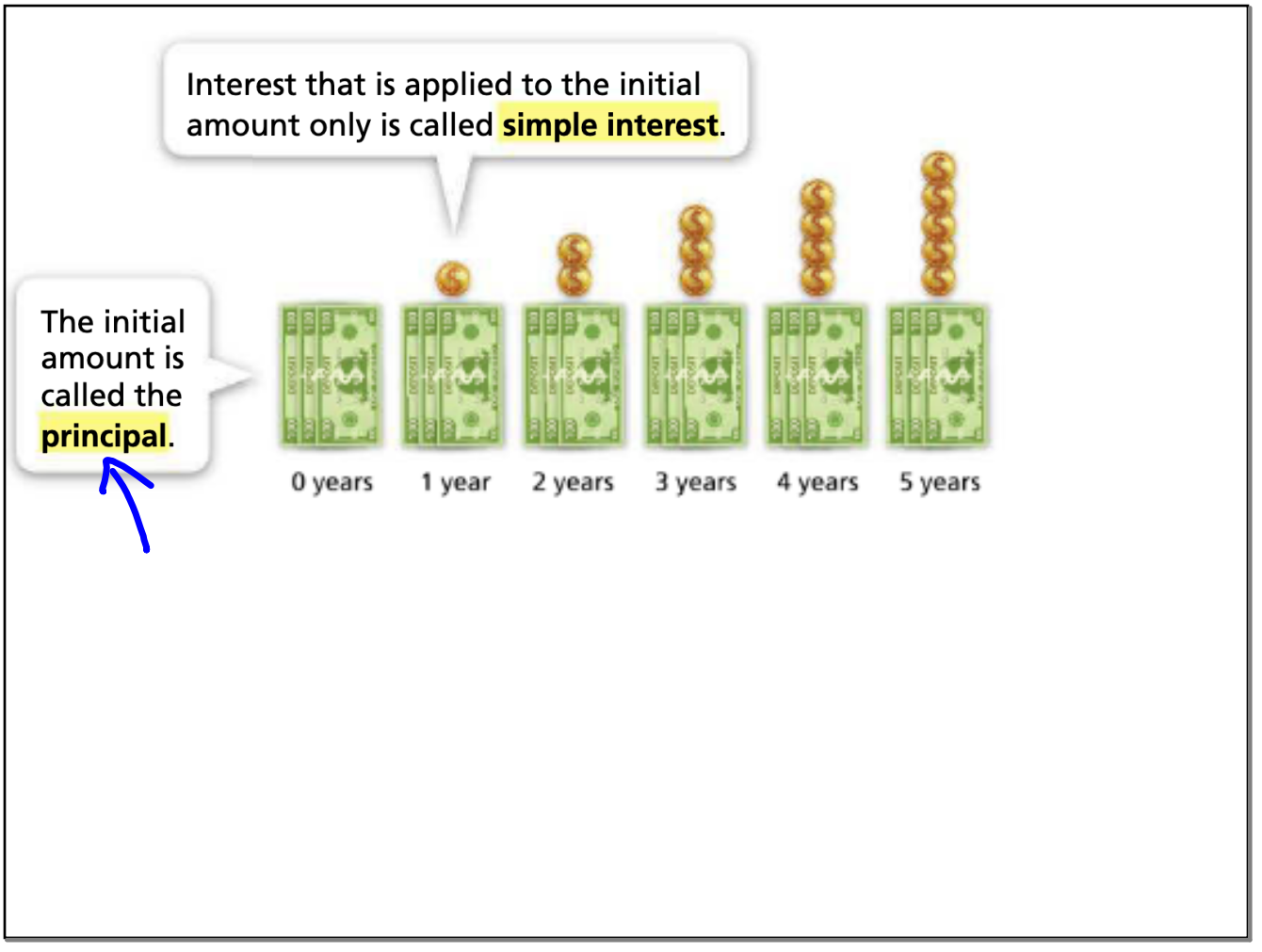
If you invest $200 in an account that gains 4% interest for the year, how much money do you make in interest? How much total money would you have at the end of the year?

$0.04(200) = 8$ $8 in interest

$200 + 8 = $208 total

After the first year, you take the interest and spend it on clothes and invest the original $200 again for another year. How much total interest would you have made for the two years?

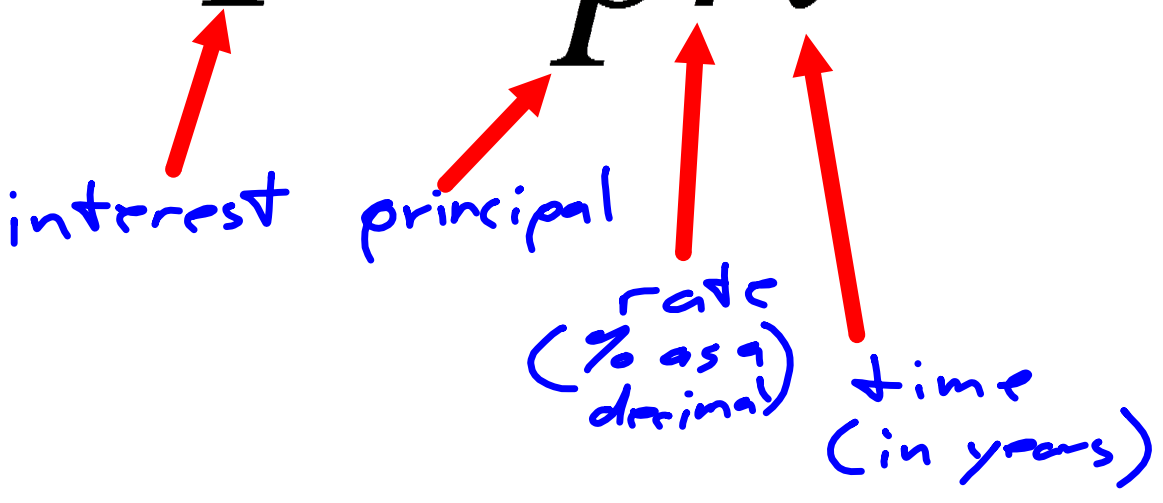
$16


Interest that is applied to the initial amount only is called simple interest.
The initial amount is called the principal.
0 years
1 year
2 years
3 years
4 years
5 years

When is interest calculated like this in the real world?

Simple Interest

$$I = prt$$



If you invest $400 at 6% interest for 5 years, how much money do you make in interest?

$I = prt$

$400(0.06)(5)$

$120

Anne invested $2300 for 8 years at 3% interest. How much total money does she have after the 8 years?

$I = prt$

$2300(0.03)(8)$

552

$2300 + 552$

$\$2852$

Jerry borrowed $800 at 12% interest. If he pays it back over the course of 6 months, how much interest will he pay on the loan?

$I = prt$

$800(0.12)\left(\frac{6}{12}\right)$

$800(0.12)(0.5)$

$48

9 months ago, Lane invested $8400 at 2.4%. How much money does he have in the account now?

$I = prt$

$8400(0.024)\left(\frac{9}{12}\right)$

151.20

$+ 8400$

$\$8551.20$

December 8, 2021

You have $2500 to invest!

Which investment will result in the highest balance at the end? $2500

Wirasnik's Winnings

[redacted]

5.7% for 4 years interest $570

Sousa Savings

22% for 10 months $458.33

McGarry Mutual

3.065% for 8 years $613

Sampson Safe

9.3% for 2 years $465

0.89

0.0089

McCaffrey's Credit Union

38.2% for 4 months $318.33

Alexandria Assets

0.89% for 34 years $756.50

Becker's Bucks

5.7% for 4 years

Sousa Savings

22% for 10 months

McGarry Mutual

3.065% for 8 years

Sampson Safe
9.3% for 2 years

McCaffrey's Credit Union
38.2% for 4 months

Alexandria Assets

0.89% for 34 years

December 8, 2021