

QUESTION #1

FINANCIAL CONCEPT: RISK DIVERSIFICATION

Question: Suppose you have some money. Is it safer to put your money into one business or investment, or to put your money into multiple businesses or investments?

Answer: a. one business or investment
b. multiple businesses or investments
c. don't know

Explanation: It is always wiser to diversify your investments. Put simply, don't put all of your eggs in one basket. Businesses of different sizes and sectors are not all likely to do poorly or well at the same time, so investing in a variety of businesses will make it less likely that you'll lose all of your investments.

QUESTION #2

FINANCIAL CONCEPT: INFLATION

Question: Suppose over the next 10 years the prices of the things you buy double. If your income also doubles, will you be able to buy less than you can buy today, the same as you can buy today, or more than you can buy today?

Answer: a. less
b. the same
c. more
d. don't know

Explanation: If the amount of money you earn is increasing at the exact same rate as inflation, then the buying power of your money will remain the same.

QUESTION #3

FINANCIAL CONCEPT: NUMERACY (INTEREST)

Question: Suppose you need to borrow 100 U.S. dollars. Which is the lower amount to pay back: 105 U.S. dollars or 100 U.S. dollars plus three percent?

Answer: a. 105 U.S. dollars
b. 100 U.S. dollars plus three percent
c. don't know

Explanation: To answer this, you have to figure out 3% of \$100. To do this:

- A. Convert the percent to a decimal by dividing the percent by 100 ($3 \div 100 = .03$)
- B. Multiply the decimal by the number you need a percentage of ($.03 \times \$100 = \3). This means $\$3 = 3\%$ of \$100.
- C. Add the answer from line B to the number you need a percentage of ($\$3 + \$100 = \$103$). This means $\$103 = \$100 + 3\%$.
- D. Since \$103 is less than \$105, then $\$100 + 3\%$ is less than paying back \$105.

This website is helpful in calculating percentages: <https://www.calculatorsoup.com/calculators/math/percentage.php>

QUESTION #4

FINANCIAL CONCEPT: COMPOUND INTEREST

Question: Suppose you put money in the bank for two years and the bank agrees to add 15 percent per year to your account. Will the bank add more money to your account the second year than it did the first year, or will it add the same amount of money both years?

Answer: a. more
b. the same
c. don't know

Explanation: To keep the math simple, let's assume you put \$100 in the bank for 2 years. Look back on the explanation to question #3, step A for help. The calculation is as follows:

	What to Calculate	How to Calculate % in \$	Add % to Starting Dollar Amount	Total (w/Interest)
1 st Year	15% of \$100.00	$.15 \times \$100.00 = \15.00	$\$15.00 + \$100.00 = \$115.00$	\$115.00
2 nd Year	15% of \$115.00	$.15 \times \$115.00 = \17.25	$\$17.25 + \$115.00 = \$132.25$	\$132.25

The reason the bank adds more money to your account the second year is because it calculates 15% in interest on the original amount deposited (\$100) **plus** the 15% in interest that was earned in the first year. This question shows the benefits of compound interest, which the Consumer Financial Protection Bureau defines as "when you earn interest on both the money you've saved and the interest you earn."

This article explains it simply: <https://www.consumerfinance.gov/ask-cfpb/i-want-to-teach-my-11-year-old-about-compound-interest-is-there-an-easy-way-to-illustrate-it-en-1683/>

QUESTION #5

FINANCIAL CONCEPT: COMPOUND INTEREST

Question: Suppose you had 100 U.S. dollars in a savings account and the bank adds 10 percent per year to the account. How much money would you have in the account after five years if you did not remove any money from the account?

Answer: a. more than 150 dollars
b. exactly 150 dollars
c. less than 150 dollars
d. don't know

Explanation: This is another example of compound interest. For this question, you'll need to calculate percentages as you did for questions 3 & 4. The calculations are as follows:

	What to Calculate	How to Calculate % in \$	Add % to Starting Dollar Amount	Total (w/Interest)
1 st Year	10% of \$100.00	$.1 \times \$100.00 = \10.00	$\$10.00 + \$100.00 = \$110.00$	\$110.00
2 nd Year	10% of \$110.00	$.1 \times \$110.00 = \11.00	$\$11.00 + \$110.00 = \$121.00$	\$121.00
3 rd Year	10% of \$121.00	$.1 \times \$121.00 = \12.10	$\$12.10 + \$121.00 = \$133.10$	\$133.10
4 th Year	10% of \$133.10	$.1 \times \$133.10 = \13.31	$\$13.31 + \$133.10 = \$146.41$	\$146.41
5 th Year	10% of \$146.41	$.1 \times \$146.41 = \14.64	$\$14.64 + \$146.41 = \$161.05$	\$161.05

If the money remains untouched, \$100, at an annual interest rate of 10%, will grow to \$161.05 because of the interest earned over 5 years.