Spread Smart

Compare investment mixes and concentration.

HIGH SCHOOL · MA.912.FL.4.5

MA.912.FL.4.5 "Compare different ways that portfolios can be diversified in investments."

NAME ______________________ DATE ____________

COMPARE THE MIX

Diversification spreads money across investments that may not move the same way, such as stocks, bonds, sectors, and countries. Compare the largest share and the kinds of investments. A smaller largest share and a wider mix usually mean more diversification.

WORKED EXAMPLE

A portfolio has $120 in bonds, $160 in an international fund, and $200 in a stock fund. What fraction of the portfolio is in its largest holding?

1. Total value: $120 + $160 + $200 = $480.
2. Largest holding: $200.
3. $200/$480 = 5/12.

Answer: 5/12 of the portfolio

PRACTICE

5 problems

1. A portfolio has $300 in one company stock and $300 in a bond fund. What fraction is in its largest holding?

ANSWER ______________________

2. $400 is split equally among four different asset classes. What percent is in the largest holding?

ANSWER ______________________

3. Portfolio A is divided equally among shares of technology companies. Portfolio B is in a fund that owns companies from many sectors. Which is more diversified by sector?

ANSWER ______________________

4. A portfolio has $500 total: $250 in a U.S. stock fund, $150 in an international fund, and $100 in bonds. What percent is in the U.S. stock fund?

ANSWER ______________________

5. Portfolio A is 60% in a stock index fund and 40% in a bond fund. Portfolio B is 100% in a stock index fund. Which has more diversification across asset classes?

ANSWER ______________________

APPLY IT Show your work

1 Jordan is saving for a car. Portfolio C has $900 split equally among a U.S. stock fund, an international stock fund, and a bond fund. Portfolio D has $900 in a U.S. stock fund. What is the largest-holding percent in each portfolio? Which has better asset-class diversification?

WORK SPACE

ANSWER ____________________

2 Mina invests $840: $420 in one gaming company, $210 in other technology companies, and $210 in a bond fund. She replaces the gaming company stock with a broad stock fund that owns companies in several sectors. What is the largest-holding percent before and after? Does diversification by company change?

WORK SPACE

ANSWER ____________________

CHALLENGE One step up

CHALLENGE

A $750 portfolio has $375 in a stock fund, $225 in bonds, and $150 in an international fund. The investor moves money only from the stock fund into a new real estate fund. How much must be moved so the stock fund is 40% of the portfolio? Give the new amounts.

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A portfolio has $300 in one company stock and $300 in a bond fund. What fraction is in its largest holding?	**1/2**
2	$400 is split equally among four different asset classes. What percent is in the largest holding?	**25%**
3	Portfolio A is divided equally among shares of technology companies. Portfolio B is in a fund that owns companies from many sectors. Which is more diversified by sector?	**Portfolio B**
4	A portfolio has $500 total: $250 in a U.S. stock fund, $150 in an international fund, and $100 in bonds. What percent is in the U.S. stock fund?	**50%**
5	Portfolio A is 60% in a stock index fund and 40% in a bond fund. Portfolio B is 100% in a stock index fund. Which has more diversification across asset classes?	**Portfolio A**

PART 2 · APPLY IT

1. **Portfolio C: 33 1/3%. Portfolio D: 100%. Portfolio C has better asset-class diversification.** Each holding in C is $300, so $300/$900 = 1/3 = 33 1/3%. D has one holding, so its largest share is 100%.
2. **50% before and 50% after. Diversification by company increases.** The largest amount is $420, and $420/$840 = 1/2 = 50% in both cases. The broad fund spreads that amount among many companies.

CHALLENGE

Move $75. New amounts: $300 stock fund, $225 bonds, $150 international fund, and $75 real estate fund.

Accept equivalent fractions and percent forms, including 1/3 for 33 1/3%. For diversification comparisons, students should identify both the spread across holdings and the types of investments.