Checkpoint Exam 3 (Private Wealth)

TOPIC: PRIVATE WEALTH - WEALTH PLANNING

TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Eddie Craig, CFA, is a tax and estate planning advisor. One of his clients, Jeannie Backofen, currently holds a 50/50 weighted, equity/fixed-income allocation in a taxable portfolio. Backofen pays a high rate of tax in her local jurisdiction. Craig identifies the opportunity to reallocate only one of these asset classes to a tax-deferred account.

Another client in a different tax jurisdiction, Taylor Clark, is subject to a maximum contribution limit of $5,600 to either a tax-deferred account (TDA) or a tax-exempt account (TEA) this year. Clark has $8,000 in pretax funds that he is prepared to fully invest for 25 years. He will make the maximum allowed contribution to either the TDA or the TEA, and then invest any remaining funds in a taxable account. Assume that Clark is subject to current and future tax rates of 30% and will earn a pretax return of 6%.

Clark also wants to establish a trust with $1 million of assets for his 17-year-old daughter. He feels his daughter is too young to manage the assets now. He will direct the trustee to distribute up to (but not more than) $100,000 per year, as long as the money is used to support his daughter's pre-med and medical school education. Five years after she receives her medical license, the trust assets will be distributed to her. In addition, Clark does not want to be responsible for any tax liabilities related to the trust.

Naoko Garrison has accumulated an estate worth $3 million, all of which is taxable. She is trying to determine whether it is beneficial to give a gift of $500,000 to her nephew now or wait and make a bequest. She estimates that her death will occur in 10 years. The applicable estate tax and gift tax rates are expected to remain indefinitely at 26% and 28%, respectively. Pretax investment returns are assumed to be 7% for both Garrison and her nephew. For investment returns, her nephew is subject to a tax rate of 25%, and she is subject to a tax rate of 35%. There are no applicable exemption amounts to gift and estate tax.

Question 1 of 26

Which recommendation should Craig make to Backofen to optimize the tax efficiency of her investments?

A) Reallocate the equity holdings to the tax-deferred account.

B) **Reallocate the fixed-income holdings to the tax-deferred account. ✓**

C) Reallocate either the equity or the fixed-income holdings to the tax-deferred account, as the tax efficiency benefits are the same.

Explanation

Taxable accounts are a tax-efficient way to hold equities as gains are only taxed when the shares are sold. Dividend income is usually taxable each year.

Tax-deferred accounts are a tax-efficient way to hold fixed-income assets to protect regular interest payments from annual taxes.

Craig should recommend that Backofen reallocates her fixed-income holdings from the taxable account to the tax-deferred account. In this way, both her equity holdings and her fixed-income holdings will benefit from tax deferral.

Note that Backofen pays a high rate of tax in her local jurisdiction. This means that optimizing the tax location of both equities and bonds will reduce the tax paid compared to her current allocation.

(Module W3.3, LOS W3.c)

Related Material

SchweserNotes - Private Wealth

Question 2 of 26

Regarding the investment of the $8,000 in pretax funds that can be invested in some combination of the TDA, TEA, and taxable accounts, which of the following amounts is *closest* to the maximum after-tax amount that Taylor will have in 25 years?

A) $21,500.

B) $23,500.

C) **$24,000.** ✓

Explanation

Choosing the TEA means that the $8,000 will be fully taxed at 30%, thereby leaving Taylor $5,600 to invest in the TEA (equal to the maximum contribution amount). Because the TEA is not subject to annual tax, the future value of the TEA is $5,600 × $(1 + 0.06)^{25}$ = $24,034.

If Taylor chooses the TDA, then only $5,600 of the $8,000 can be invested in the TDA as a result of the contribution limit. The value of the TDA in 25 years is $5,600 × $(1 + 0.06)^{25} \times (1 - 0.30)$ = $16,824. The $2,400 that is not invested in the TDA will be subject initially to 30% tax, leaving $1,680. The $1,680 is subsequently invested in a taxable account earning a 6% pretax annual return, equaling $1,680 × $(1 + [0.06 \times (1 - 0.30)])^{25}$ = $4,699 at the end of 25 years. Therefore, the total future value of investing in the TDA and taxable account is $21,523.

That makes the TEA the best choice with a future after-tax total value of $24,034. Note that a key issue in solving this question is to determine the $8,000 pretax amount is just sufficient to fund the maximum $5,600 after-tax amount that can go to the TEA versus the TDA, which can take $5,600 in pretax funds—leaving $1,680 after-tax funds that can go into a taxable account.

(Module W3.3, LOS W3.c)

Related Material

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Question 3 of 26

Which of the following trusts is *most appropriate* for Clark's needs?

A) Fixed trust.

B) Revocable trust.

C) **Discretionary trust.** ✓

Explanation

A discretionary trust will work because it gives the trustee discretion to determine how much to distribute each year (up to the $100,000 limit). It can be set up as an irrevocable trust so that Clark will not be taxed on the trust income or assets. A fixed trust will not work, as the trustee would not have discretion on how much to distribute. A revocable trust will not work, as Clark would be responsible for any taxes incurred by the trust. Any form of trust could work to prevent the daughter from having immediate control of the trust assets, so that cannot be used to make the decision regarding which form of trust is best to meet Clark's objectives.

(Module W7.1, LOS W7.a)

Related Material

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Question 4 of 26

Which of the following amounts is *closest* to the relative value of gifting the $500,000 now versus making a bequest at death, assuming that Garrison's nephew pays the gift tax?

A) 0.97.

B) **1.04.** ✓

C) 1.06.

Explanation

$FV_{\text{taxable gift}} / FV_{\text{bequest}} = (1 − T_g)[(1 + r_g (1 − t_g)]^n / [1 + r_e(1 − t_e)]^n (1 − T_e)$

$= (1 – 0.28)[(1 + 0.07 (1 − 0.25)]^{10} / [1 + 0.07(1 − 0.35)]^{10} (1 − 0.26)$

= 1.201029 / 1.154708

= 1.04.

(Module W6.2, LOS W6.b)

Related Material

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TOPIC: PRIVATE WEALTH - PRESERVING THE WEALTH

TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Marc and Tara Dawson are both age 35, are married, and have two children at ages 8 and 9.

After raising the two children for their first five years, Tara returned to school for interior design. During that time, she won numerous student awards for her unique and outstanding creative designs, and upon graduation a few weeks ago, she was immediately hired at a leading interior design firm. She is now ready to begin a very promising and lucrative new career in interior design, but she is particularly concerned about career risk and its potential impact on their future savings.

The family recently moved out of their large city apartment and into their first house, located in the outskirts of the city. Although their neighborhood is considered upscale and safe, because their house is detached and located on a corner lot, Marc is worried about the potential of the home being burglarized. To try to manage the risk, Marc has installed a state-of-the-art burglar alarm for the home. The alarm installer posts signs on all the doors and windows indicating there is an alarm system present. If someone enters the house and does not immediately enter the deactivation code, a loud alarm will sound, and the police will automatically be called.

Marc's parents are both aged 65 and retired. They reasonably expect to live for another 20 years. His parents currently have $2 million of after-tax savings in an investment account, and that amount is meant to cover their living expenses for the next 20 years. They are trying to determine whether to use those funds to purchase a fixed annuity to fund their retirement, or to self-insure instead. They are aware of the concepts of (1) return of principal, (2) interest on principal, and (3) mortality credits.

Additionally, Marc's dad is considering the purchase of a $1 million life insurance policy for the couple. He wants to ensure that the policyholders are able to access some of their benefits even with missed premiums.

Question 5 of 26

In which financial stage of life should Tara be *most* concerned about career risk?

A) Early career.

B) Career development.

C) **Peak accumulation. ✓**

Explanation

Career risk is likely to be highest during the peak accumulation phase (generally ages 51–60) when most individuals are near or at their maximum earnings and rate of wealth accumulation. It is also the point when it can be most difficult to find a new, comparable job.

(Module 9.2, LOS 9.b)

Related Material
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Question 6 of 26

Marc's installation of the burglar alarm is *best* described as which of the following risk management techniques?

A) Risk avoidance.

B) **Risk mitigation. ✓**

C) Risk transfer.

Explanation

The signage on doors and windows will make it less likely a burglar will enter the home. If one does, the loud alarm is likely to scare them off before they can do much damage, reducing the likelihood and amount of loss due to burglary. That is risk mitigation. Not owning a home would be risk avoidance. Buying property and loss insurance to cover losses due to burglary would be risk transfer.

(Module W5.1, LOS W5.a)

Related Material
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Question 7 of 26

If Marc's parents self-insure instead of buying a fixed annuity, how many of the three annuity return components (return of principal, interest on principal, and mortality credits) can they earn?

A) One.

B) **Two. ✓**

C) Three.

Explanation

To self-insure, Marc's parents could save and invest the money they would have paid for insurance. Then, over time, they can withdraw the initial principal they invested and the interest on that principal. These are two of the three listed items.

However, self-insurance cannot earn mortality credits. An annuitant couple who self-insures faces the longevity risk of outliving their money. Buying a lifetime annuity insures this risk because the insurance company prices the annuity based on average life expectancy of all annuitants. If the couple lives longer than expected, they are essentially receiving the funds of other annuitants who live shorter-than-expected lives.

(Module W5.2, LOS W5.b)

Related Material

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Question 8 of 26

Which of the following would ensure the policyholders are able to access benefits even if some premiums are missed?

A) **Nonforfeiture clause. ✓**

B) Universal life insurance.

C) Participating life insurance.

Explanation

A nonforfeiture clause allows policyholders to access some of their benefits even with missed payments.

(Module W5.2, LOS W5.b)

Related Material

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TOPIC: PRIVATE WEALTH - PRESERVING THE WEALTH

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Cindy and Jay Nguyen met three years ago, when Cindy joined a software firm in San Francisco. Cindy is one of only two specialist software designers at the firm, and Jay works in the HR department. Now aged 28 and 29, respectively, they have recently married and are saving for a down payment to buy their dream home in the Bay Area next year. Cindy's father has encouraged the couple to meet his long-term financial advisor, Nancy Zhang, CFA, to review their financial plan.

Zhang notes that Cindy's earnings are three times as high as Jay's due to her specialized skill set. Zhang explores the impact on the couple's finances in the event of a long-term illness or disability. Zhang shares with the couple three definitions of *disability*:

- *Definition* 1. Inability to perform tasks in any job matching one's education and experience.
- *Definition* 2. Inability to execute the critical tasks in one's current job.
- *Definition* 3. Inability to work in any occupation.

Next, Zhang explores employment-related human capital risks for the couple, explaining it is essential to identify, quantify, evaluate, manage, and monitor the characteristics of human capital. Zhang finally discusses the need for life insurance with Cindy and Jay.