

Problem 1:

A 30-year bond with a face value of \$1000 has a coupon rate of 5.5%, with semiannual payments.

- a. What is the coupon payment for this bond?
- b. Draw the cash flows for the bond on a timeline.

Solution 1.a:

Formula for coupon payment (by definition)

$$CPN = \frac{\text{Coupon Payment Rate} \cdot \text{Face Value}}{\text{Number of Coupons per Year}}$$

$$CPN = \frac{0.055 \cdot \$1000}{2} = \$27.50$$

Solution 2.b:

t	0		1		2		..	30	
Payment period	First Half	Second Half	FH	SH	FH	SH	...	FH	SH
CF			\$27.5	\$27.5	\$27.5	\$27.5	...	\$27.5	\$1027.5