The following information pertains to questions 1 and 2

The following investor contributions and return data are available for the performance of the Aldergrove Fund over three consecutive annual periods. Investor contributions are made at the beginning of each year. Each year's return reflects dividends and gains reinvested during the year.

	Investor contributions (USD)	Annual return
Year 1	20,000	+25%
Year 2	5,000	-20%
Year 3	5,000	+15%

1. **The Aldergrove Fund's annualized time-weighted return is closest to:**

   a. 4.77%
   b. 6.67%
   c. 15.00%

2. **The Aldergrove Fund's money-weighted return is closest to:**

   a. 4.77%
   b. 6.67%
   c. 4.30%

The following information pertains to questions 3 and 4

An investor places 60,000 with the Brenmar Fund at the start of year 1, and the fund returns +30% with all dividends reinvested. At the start of year 2 the investor redeems 20,000, after which the fund returns –5%.

3. The Brenmar Fund's annualized time-weighted return is closest to:

a. 23.50%
b. 12.50%
c. 11.13%

4. The Brenmar Fund's money-weighted return is closest to:

a. 12.50%
b. 13.93%
c. 11.13%

The following information pertains to questions 5 and 6

A 100,000 investment into the Corvale Fund returns +12% in year 1 with dividends reinvested. At the start of year 2, investors add 40,000 and the fund returns –8%. At the start of year 3, the fund distributes 30,000 in dividends to investors (not reinvested), then returns +20%.

5. The Corvale Fund's annualized time-weighted return is closest to:

   a. 8.00%
   b. 23.65%
   c. 7.33%

6. The Corvale Fund's money-weighted return is closest to:

   a. 8.00%
   b. 5.89%
   c. 7.33%

The following information pertains to questions 7 and 8

The Northwind fund begins the year valued at 300. By 30 April, before any cash flow, investment gains have raised it to 330. Investors then contribute 60, bringing it to 390. By 31 August it has fallen to 370.5, with no cash flow at that date. By 31 December it stands at 414.96, its year-end value, with no further flows.

7. The Northwind Fund's time-weighted return for the year is closest to:

a. 17.04%
b. 5.67%
c. 17.00%

8. The Northwind Fund's annualized money-weighted return is closest to:

a. 16.21%
b. 15.41%
c. 5.14%

The following information pertains to questions 9 and 10

The Sable Fund begins the year at 500. By 31 March, gains increase its value to 530. Investors then withdraw 30, leaving 500 in the fund. By 30 June it has fallen to 480, with no cash flow. By 30 September gains bring it to 518.4; investors then contribute 50, raising it to 568.4. By 31 December it stands at 596.82, its year-end value.

9. The Sable Fund's time-weighted return for the year is closest to:

a. 15.40%

b. 15.00%

c. 3.75%

10. The Sable Fund's annualized money-weighted return is closest to:

a. 3.71%

b. 14.84%

c. 15.69%

11. Over a subperiod a portfolio begins at 400 and earns reinvested dividends of 6, realized gains of 10, and unrealized gains of 4. Its holding period return is closest to:

a. 4.76%

b. 5.00%

c. 4.00%

12. Two investors hold the same fund and see the same annual returns, but one makes a large contribution the year before a strong return and the other the year before a weak return. Across the two investors:

a. Time-weighted returns match, but money-weighted returns differ

b. Money-weighted returns match, but time-weighted returns differ

c. Both returns match exactly

13. A manager at Corvell Capital runs a public equity portfolio and does not control investor contributions or withdrawals. The appropriate measure of the manager's performance is:

a. The money-weighted return

b. The time-weighted return

c. A blend of the two returns

14. Investor Dora Aldridge wants to know the actual return her own contribution and withdrawal decisions produced. The measure she should use is:

a. The money-weighted return

b. The time-weighted return

c. The arithmetic mean of subperiod returns

15. Assuming an average daily return of 0.04%, the time-weighted annual return computed over 252 trading days is closest to:

a. 10.60%

b. 15.72%

c. 10.08%