DataPoint Engineering is considering the purchase of a new piece of equipment for $220,000. It has an eight-year midpoint of its asset depreciation range (ADR). It will require and additional initial investment of $120,000 in nondepreciable working capital. Thirty thousand dollars of this investment will be recovered after the sixth year and will provide additional cash flow for that year. Income before depreciation and taxes for the next six years will e:

Year Amount

1. $170,000
2. 150,000
3. 120,000
4. 105,000
5. 90,000
6. 80,000

The tax rate is 30 percent. The cost of capital must be computed based on the following (round the final value to the nearest whole number):

Cost (after tax) Weights

Debt Kd 6.5% 30%

Preferred stock Kp 10.2 10

Common equity (retained earnings Ke 15.0 60

a) determine the annual depreciation schedule

b) determine annual cash flow. Include recovered working capital in the sixth year.

c) determine the weighted average cost of capital

d) determine the net present value. should datapoint purchase the new equipment?