Choosing Two Filters for a Print Display

Scoring guide · one credit per question · review written work against each rubric

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Question 1

Choice (3)

L passes 0.20, the smallest listed fraction.

Question 2

J passes 0.30 of the starting radiation. K passes 0.40 of that, for 0.30 × 0.40 = 0.12.

Question 3

J followed by K passes 0.12 ultraviolet and 0.90 × 0.85 = 0.765 visible, meeting both. J followed by L passes 0.06 ultraviolet but only 0.54 visible.

Question 4

Each filter still passes the same fraction of what reaches it. Multiplying 0.85 × 0.90 gives the same result, 0.765.