THE QUESTION | UNIT CONVERSION

How many seconds in total are there in x weeks, x days, x hours, x minutes and x seconds?

Unit Conversion | Factoring | Hidden Trap: leaving out the final x seconds

(a) 11580x
Counts weeks, days and hours in minutes (10080 + 1440 + 60) and drops the rest.

(b) 11581x
The total in minutes, not in seconds.

(c) 694860x
Everything up to minutes is included, but the final x seconds are missing.

(d) 694861x ✓
604800x + 86400x + 3600x + 60x + x = 694861x.

CRACK THE HIDDEN RULE

Since each unit appears x times, factor x out: Total = x (7 days in seconds + 1 day + 1 hour + 1 minute + 1 second). Convert one of each unit to seconds and add, then multiply by x.

Convert in a chain: 1 minute = 60 s, 1 hour = 3600 s, 1 day = 86400 s, 1 week = 604800 s.

Total = x (604800 + 86400 + 3600 + 60 + 1) = 694861 x

1 WEEK	1 DAY + 1 HOUR	1 MIN + 1 SEC
7 x 86400 = 604800 s	86400 + 3600 = 90000 s	61 s

WORKED IN 3 CLEAN STEPS

1 Convert one of each unit to seconds
1 minute = 60 s. 1 hour = 3600 s. 1 day = 24 x 3600 = 86400 s. 1 week = 7 x 86400 = 604800 s.

2 Add them
604800 + 86400 + 3600 + 60 + 1 = 694861.

3 Multiply by x
Because every unit appears x times, the total is 694861x seconds.

ANSWER: (d) 694861x

THE 3-SECOND SHORTCUT

Size check first: one week alone is 604800 s, so only (c) and (d) are possible. Then remember the final x seconds, which makes it (d).

same x everywhere → factor x out | 1 week = 604800 s | size check: weeks alone > 600000

→ Options (a) and (b) are minute totals, far too small for seconds.
→ Do not forget the final single second.

WHY ASPIRANTS LOSE MARKS HERE

1. **Omitting the last x seconds.** That gives 694860x.
2. **Using 30 days or 52 weeks.** The question only uses weeks, days and smaller units.
3. **Stopping at the unit conversions.** Multiply by x at the end.

ATTEMPT	FLAG	SKIP
~30 sec	if you forget 86400	never
Eliminate small options, then add five numbers.	24 x 3600 = 86400. Recompute quickly.	A pure conversion mark.

THE ONE-LINE TAKEAWAY

Factor out the common x, convert one of each unit to seconds, and add all five, including the last second.

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