

Sunscreen number crunch

Answers



If all of these sunscreens had the same ingredients and were the same quality, which sunscreen is best value for money?

1. Find out the cost of sunscreen per ml. The first one has been done as an example.

When you find the answer, round the answer up (if it's 0.06 or more) or down (if it's 0.05 or less) to two decimal places.

2. Which sunscreen works out to be the cheapest for a family to use? **Brand D**

Sunscreen	Amount of sunscreen in bottle	Cost	Sum	Cost per ml
EXAMPLE	250ml	\$28.00	$28 \div 250 = 0.112$	0.11 cents
SUNSCREEN BRAND A	110ml	\$11.50	$11.5 \div 110 = 0.104$	0.10 cents
SUNSCREEN BRAND B	35ml	\$8.00	$8 \div 35 = 0.228$	0.23 cents
SUNSCREEN BRAND C	110ml	\$13.20	$13.2 \div 110 = 0.12$	0.12 cents
SUNSCREEN BRAND D	250ml	\$22.50	$22.5 \div 250 = 0.09$	0.09 cents
SUNSCREEN BRAND E	350ml	\$35.00	$35 \div 350 = 0.1$	0.10 cents

Q: When you have completed the tables on both pages, decide which sunscreen you would buy in the supermarket?

A: SUNSCREEN BRAND **D or E**

Why? D is cheapest / E is also cheap and has more days before expiry



3. Work out how many days are left until the sunscreen expires.

If today's date was **Tuesday, 1st September, 2017** (01.09.17), how many more days could you use each sunscreen for?

Hint: Don't forget how many days are in each month.

Date: 1st September, 2017 (01.09.17)	Expiry date:	Sum	Number of days until sunscreen expires
EXAMPLE	31 st December 2017	30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) = 122	122 days
SUNSCREEN BRAND A	15 th February 2018	30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) + 31 (Jan) + 15 (Feb) = 168	168 days
SUNSCREEN BRAND B	14 th November 2017	30 (Sep) + 31 (Oct) + 14 (Nov) = 75	75 days
SUNSCREEN BRAND C	31 st August 2018	30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) + 31 (Jan) + 28 (Feb) + 31 (Mar) + 30 (Apr) + 31 (May) + 30 (Jun) + 31 (Jul) + 31 (Aug) = 365 12 months = one year = 365 days	365 days
SUNSCREEN BRAND D	1 st January 2019	30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) + 31 (Jan) + 28 (Feb) + 31 (Mar) + 30 (Apr) + 31 (May) + 30 (Jun) + 31 (Jul) + 31 (Aug) + 30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) = 487 4 months (122 days) + 12 months (365 days) = 487 days	487 days
SUNSCREEN BRAND E	31 st March 2019	30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) + 31 (Jan) + 28 (Feb) + 31 (Mar) + 30 (Apr) + 31 (May) + 30 (Jun) + 31 (Jul) + 31 (Aug) + 30 (Sep) + 31 (Oct) + 30 (Nov) + 31 (Dec) + 31 (Jan) + 28 (Feb) + 31 (Mar) = 607 4 months (122 days) + 12 months (365 days) + 3 months (90 days) = 577 days	577 days