

Sunscreen numbers 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

Jan 2012

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**

(D is cheapest / E is also cheap and has more days before expiry)



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3. Work out how many days are left until the sunscreen expires. If today's date was Saturday, 1st September, 2012 (01.09.12), how many more days could you use each sunscreen for?

Hint: Don't forget how many days are in each month. Also 2012 is a leap year. Do you know what that means?

Date: 1st September, 2012 (01.09.12)	Expiry date:	Sum	Number of days until sunscreen expires
EXAMPLE	31 st December 2012	30 (Sep)+ 31 (Oct)+ 30 (Nov) + 31 (Dec) = 122	122 days
SUNSCREEN BRAND A	15 th February, 2013	30 (Sep)+ 31 (Oct)+ 30 (Nov) + 31 (Dec) + 31 (Jan) + 15 (Feb) = 168	168 days
SUNSCREEN BRAND B	14 th November, 2012	30 (Sep)+ 31 (Oct)+ 14 (Nov) = 75	75 days
SUNSCREEN BRAND C	31 st August 2013	30 (Sep)+ 31 (Oct) + 30 (Nov) + 31 (Dec) + 31 (Jan) + 29 (Feb) + 31 (Mar) + 30 (Apr) + 31 (May) + 30 (Jun) + 31 (July) + 31 (Aug) = 366 OR Jan, March, May, Jul, Aug, Oct, Dec = 31 days / 7 x 31 = 217 Feb = 29 days / 1 x 29 = 29 Apr, Jun, Sep, Nov = 30 days / 4 x 30 = 120 217 + 29 + 120 = 366	366 days
SUNSCREEN BRAND D	1 st January 2014	1 st Sep 2012 to 31 st Dec 2012 = 122 1 st Jan 2013 to 31 st Dec 2013 = 365 122 + 365 = 487	487 days
SUNSCREEN BRAND E	31 st March, 2015	1 st Sep 2012 to 31 st Dec 2012 = 122 1 st Jan 2013 to 31 st Dec 2013 = 365 1 st Jan 2014 to 31 st Dec 2014 = 365 1 st Jan 2015 to 1 st April 2015 / 31 (Jan) + 28 (Feb) + 31 (Mar) = 90 122+ 365 + 365 + 90 = 942	942 days