

February 1st

5-a-day

Numeracy

Three consecutive numbers add to 21.

What are they?

6, 7, 8

**Starter**

Soup

Mushrooms

**Main**

Chicken

Beef

Fish

List all the possible combinations

SC

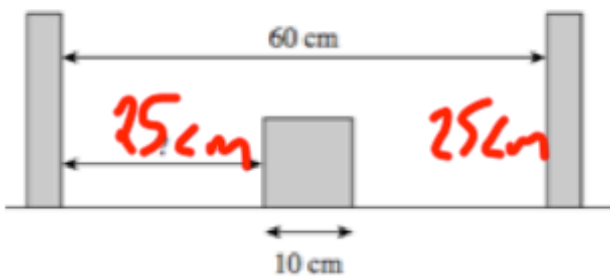
MC

SB

MB

SF

MF



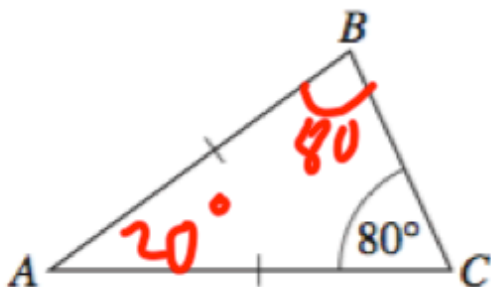
Mollie watches a film that lasts 130 minutes.

It begins at 6:15pm

What time does it end?

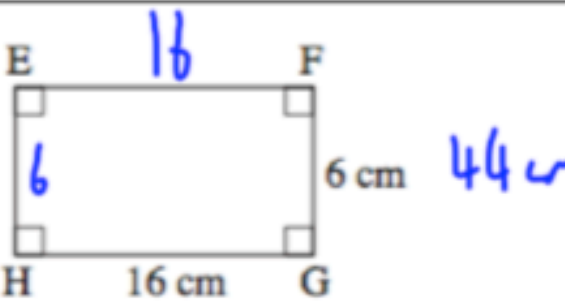
2 hours 10 minutes

8:25 pm



Work out angle BAC

20°

February 1st	5-a-day	Foundation												
	<p>An equilateral triangle has the same perimeter of this rectangle. What is the length of each side?</p>	$44 \div 3 = 14.\dot{6} \text{ cm}$ $14.666\dots \text{ cm}$												
<p>In a prize draw, 200 tickets are sold. There is one prize.</p> <p>Mr and Mrs James buy 4 tickets each. Their two children, John and Jane buy 2 tickets each.</p>	<p>What is the probability noone from the family wins the prize?</p>	$\text{lose } \frac{188}{200} = \frac{47}{50}$												
<p>How far would you travel if you travelled for 2 hour 30 minutes at 40mph?</p>	<p>How long does it take to travel 360 miles at 30mph?</p>	$2.5 \times 40 = 100 \text{ miles}$												
$3\frac{1}{2} - \frac{4}{5}$	$\frac{7}{2} - \frac{4}{5} = \frac{35}{10} - \frac{8}{10}$ $= \frac{27}{10} = 2\frac{7}{10}$													
<p>Complete this table for the graph <math>y=x^2 - 1</math></p> <table border="1" data-bbox="183 1859 766 2016"> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td>3</td> <td>0</td> <td>-1</td> <td>0</td> <td>3</td> </tr> </table>		x	-2	-1	0	1	2	y	3	0	-1	0	3	
x	-2	-1	0	1	2									
y	3	0	-1	0	3									

February 1	5-a-day	Higher
<p>What is the size of each exterior angle of a regular pentagon?</p> $360 \div 5 = 72^\circ$		<p>What is the size of each interior angle of a regular heptagon?</p> $360^\circ \div 7 = 51.428\dots$ $180 - 51.428\dots = 128.57^\circ$
<p>Simplify</p> $5w^{-2}y^6 \times 2w^5y$	$10w^3y^7$	
$w = \frac{20(a + c)}{c}$ <p>Make a the subject.</p>		$cw = 20a + 20c$ $cw - 20c = 20a$ $a = \frac{cw - 20c}{20}$
<p>Two bottles are similar.</p> <p>Bottle A is 15cm tall. <math>1 \times 1.3</math></p> <p>Bottle B is 20cm tall.</p> <p>The volume of Bottle A is <math>400\text{cm}^3</math></p>		<p>Work out the volume of Bottle B</p> $400 \times (1.3)^3$ $948.148 \text{ cm}^3$
<p>Calculate the surface area of a sphere of radius 10cm.</p> $4\pi r^2$		$4 \times \pi \times 100$ $400\pi \text{ cm}^2$ <p>or <math>1256.64 \text{ cm}^2</math></p>