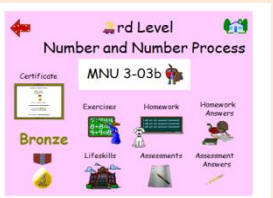
RIGOUR

by cdmasterworks Ltd

Numeracy for Learning, Life and Work



March National Maths Calendar

#abitofmathseveryday

1 What is the probability of selecting an orange from a bowl containing 8 apples, 6 oranges, 4 pears and 10 oranges?

2 Factorise the following expression...

$20 - 16m$

3 Calculate the range of the following data set...

4, 1, -3, 7, 0, -5

4 Multiply out the following brackets and simplify...

$4(2x - 6) + 19$

5 Calculate

$\frac{4}{9}$ of 1602

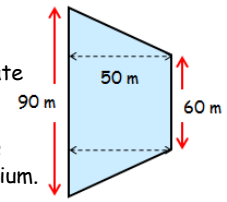
6 Simplify the following expression...

$6z^2 - 5z + z^2 + 6z$

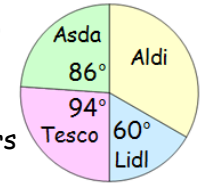
7 Solve the following equation...

$8x + 15 = 4 - 3x$

8 Calculate the area of this trapezium.



9 240 shoppers asked. How many went to Aldi?



10 Increase 40 cm by 30%

11 A roller coaster took 3 minutes to cover 2·5 miles. What was it's average speed?

12 In a florist, all flowers cost the same. Max pays £5·81 for a bunch of 7 flowers for his mum for Mother's Day. How much would it cost for a bunch of 9?

13 If a = 6 and b = -1 calculate :-

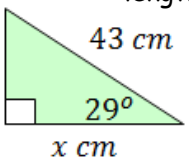
$$\frac{3a - 2b}{4}$$

14 Round 3·141592654 to 3 decimal places.

15 A standard bottle of wine holds $\frac{3}{4}$ litre. How many 175 ml glasses of wine could be poured from a standard bottle?

16 Which is more likely? Picking a club from a pack of playing cards or getting a score of more than 4 from rolling a dice.

17 Calculate the length of the missing side.



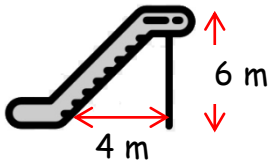
18 Different colours of paint were used for a 10 litre mixture. 6·81 litres of blue paint and 2·059 litres of yellow paint were used with the rest of the paint being red. How much red paint was used?

19 Write 4% as a fraction and a decimal.

20 Calculate

$\frac{5}{6} + \frac{2}{3}$

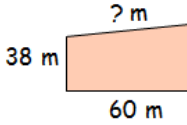
21 Calculate the gradient of this escalator...



22 Write a rule and complete the table...

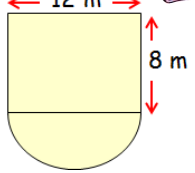
shelf size (S)	1	2	3	16	?
pieces of wood (W)	4	7	10	?	76

23 The perimeter of this shape is 206 m. Calculate the length of the missing side...

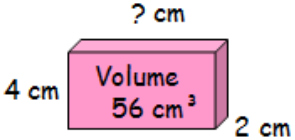


24 Robert is growing a sunflower. One week its height increased from 48 cm to 60 cm. Calculate the percentage increase in the sunflower's height.

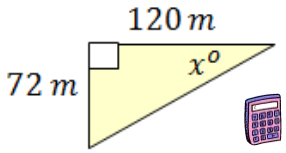
25 Calculate the area of this shape...



26 Calculate the length of this cuboid...



27 Calculate the size of the missing angle.

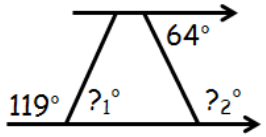


28 The body mass index, B, of a person who weighs w kilograms and whose height is h metres is given by the formula

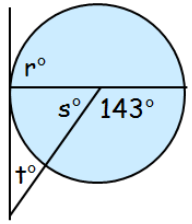
$$B = \frac{w}{h^2}$$

Calculate the value of B for a person who weighs 54 kilograms and is 1·5 metres tall.

29 Calculate the missing angles...



30 Calculate the size of the missing angles...



31 Calculate the length of the missing side.