Fractions! www.m4ths.com SB!

(1) Find the value of $2\frac{1}{3} + \frac{4}{5}$

(2) Find the value of $1\frac{2}{7} \times 4$

(3) Find the value of $\frac{5}{6} \div 4$

(4) Find the value of $3\frac{4}{7} - \frac{7}{9}$

(5) Find the value of $2\frac{2}{9} + 1\frac{1}{6}$

(6) John, Fred and Bob share a whole cake. John has $\frac{1}{3}$, Fred has $\frac{2}{5}$ and Bob has the rest. What fraction of the cake does Bob have?

(7) How many thirds go into a fifth?

(8) What is $\frac{1}{7}$ of $\frac{1}{10}$?

(9) A rectangle has one side length of $2\frac{1}{3}$ cm and a perimeter of 5cm.

(a) Find the missing side length.

(b) Find the area of the rectangle.

(10) What is $\frac{2}{5} \times 3\frac{1}{3}$?

(11) At a school one fifth of the people are teachers. Of the teachers two thirds like sport. What fraction of the people at the school are teachers who like sport?

(12) What is one fifth squared?

(13) Bob has half a cake and gives it to Fred. Fred eats one seventh of the cake he was given. What fraction of a **FULL CAKE** has Fred eaten?

(14) Find the difference between $\frac{2}{11}$ and $\frac{4}{7}$

(15) Find the fraction half-way between $\frac{4}{9}$ and $\frac{5}{13}$

(16) John has a piece of paper and he cuts it in half. Whatever he has left he cuts in half. He keeps repeating this process. What fraction of the paper will remain after he has made 5 cuts?

(17) Find the value of $\frac{1}{3} + \frac{1}{6} - \frac{1}{12}$

(18) Find $\frac{a}{b} + \frac{c}{d}$

(19) John thinks of a non-integer. When he subtracts $1\frac{3}{5}$ his new number is $\frac{2}{3}$. What number did John originally think of?

(20) The area of a circle $A = \pi r^2$ where r is the radius of the circle. Find the area of a circle with a radius of $\frac{2}{5}$. Give your answer in terms of π.

(21) Find $\frac{2}{7}$ of $2\frac{5}{8}$

(22) Find the cube of $\frac{3}{7}$

(23) A, B, C and D are the only outcomes of a trial P(A) = 0.2, P(B) is one third and P(C) is one seventh. Find P(D).

(24) John has 2.4 metres of rope. He needs to cut lengths of $\frac{5}{7}$ of a metre from it. How many lengths can he get from the rope?

(25) In a school 40% of the people are girls. 1/5 of the girls leave the school. What fraction of the people left at the school are girls?

(26) By cancelling common factors find the value of
$\frac{100}{7} \times \frac{21}{300} \times \frac{5}{25}$

(27) What is $\frac{a}{b}$ divided by $\frac{b}{a}$?

(28) What power of $\frac{1}{3}$ is $\frac{1}{81}$?

(29) The temperature in Lapland drops by $\frac{1}{3}$ from -12. What is the new temperature?

(30) What is the reciprocal of $\frac{1}{3}$?

(31) Find the LCM of 2 and a.

(32) Use your answer to the previous question to add one half and $\frac{3}{a}$.

(33) What is the value of $\sqrt{\frac{1}{16}}$?

(34) John keeps cutting a piece of paper in half such that after one cut he has a half, two cuts he has a quarter, 3 cuts he has one eight and so on. How many cuts will he have to do before less than one one-hundredth of the paper is left?

(35) The fraction $\frac{a}{b}$ is divided by another fraction. The value of the fraction after the division is $\frac{a}{2}$. What was the fraction divided by?

(36) The volume of a cube is $\frac{1}{64}$ cm³. Sketch the cube show the side lengths on the diagram.

(37) What fraction of the diagram below is shaded out?

(38) John is trying to find the value of the sum below

$$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32}$$

What advice would you give him if he needed to find the value without a calculator?

(39) The diameter of a circle $\frac{4a}{10b}$ Find an expression for the radius of the circle.

(40) Find the square root $\frac{25}{36}$

(41) Enjoy the rest.