MM

Brain Bogglers

49) This can only occur in Febuary which is the only month with exactly 4 weeks (non-leap years)

$1+14=15$
$28+1-14=15$

Feb 15

50) let x represent today's date

$x-2+5-1-3+2-9=$ Apr 29
$x=$ Apr $29+2-5+1+3-2+9$
$x=$ Apr 37
$x=$ May 7

12

51) 1929 is not divisible by so it is not a leap year

$200000 \div 60 = 3333.\overline{3}$ hours
$3333.\overline{3} \div 24 = 138.\overline{8}$ days

139^{th} day of a non-leap year is May 19
$139-31-28-31-30=19$

52) Split 56 into $16+24+16$

May 30 8am + 16hr = May 31 12am
May 31 12am + 24hr = Jun 1 12am
Jun 1 12am + 16hr = Jun 1 4pm

53) $\frac{8}{100} \times \frac{42}{x}$ $42 \times 100 \div 8 = 525$

$525-360=165$

54) 1 spider take 6 mins to spin 1 web

100 spiders : 200 webs
1 spider : 2 webs

$6 \times 2 = 12$ mins

55) let x represent the weight of a bat
let y represent the weight of a ball

$$5x + 4y = 58\text{kg}$$
$$4x + 5y = 50\text{kg}$$
$$25x + 20y = 290$$
$$-16x - 20y = -200$$
$$9x = 90$$
$$x = 10$$

∴ a bat weighs 10 Kg

56) Every 12 mins, they eat 3 pizzas (Abbas eats 1, M eats 2)

$24 \div 12 \times 3 = 6$ pizzas

57) $10.5 \times 7.5 = 78\frac{3}{4}$
$78\frac{3}{4} \div 9 = 8\frac{3}{4}$ days

58) 6 black + 2 white = 8 marbles

59) 1 black + 1 white + 1 extra = 3