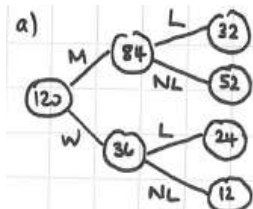


A little bit of maths each day – March 2018 Calendar – Foundation Tier – Answers

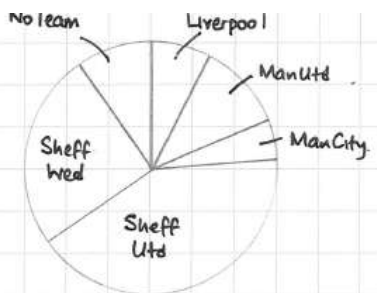
- 1st Pete's
 2nd $x = 18, y = 9$
 3rd/4th (a) 29.5 (b) 36 (c) 1st class did slightly better – larger median, 2nd class more consistent – smaller range
 5th 70 white, 80 black
 6th (a) $\frac{247}{10000}$ (b) 27.5% (c) £76.70
 7th (a) 8100000mm (b) 34000cm² (c) 948cm³
 8th (a) 77.937 (b) 891.8
 9th (a) 0.079947 (b) 799.47 (c) 0.0423
 10th/11th (a) Pay £3 before you travel anywhere (standing charge)
 (b) Gradient 2 = £2 per mile travelled (c) $y = 2x + 3$
 12th (a) $6x^2 - 17x - 14$ (b) -10 and 8
 13th Translation $\begin{pmatrix} 1 \\ -3 \end{pmatrix}$
 14th 208cm²
 15th 35
 16th (a) $6(2x - 3y)$ (b) $3xy^2(5xy^2 - 1 + 8x^2)$ (c) $(x - 7)(x - 4)$
 17th/18th (a) 158m² (b) overestimate – all figures rounded up
 19th $r = \frac{5p+5}{3}$
 20th 2 mph
 21st (a) $27x + 2$ (b) $3^9/7$
 22nd (a) (2, 2) (b) 10
 23rd (a) $2^3 \times 3^2 \times 5$ (b) $2^2 \times 3 \times 5 \times 7$ (c) 60 (d) 2520
 24th/25th (a) (b) $\frac{12}{120}$ (c) 46.7%



26th 7.25%

27th

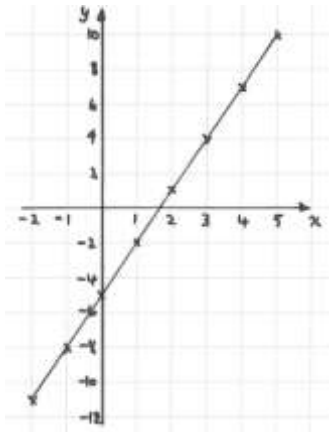
Total Freq. = 240
 $360^\circ \div 240 = 1.5$
 Liverpool : $18 \times 1.5 = 27^\circ$
 Man Utd : $26 \times 1.5 = 39^\circ$
 Man C : $12 \times 1.5 = 18^\circ$
 Sheff Utd : $100 \times 1.5 = 150^\circ$
 Sheff Wed : $64 \times 1.5 = 96^\circ$
 No Team : $20 \times 1.5 = 30^\circ$



28th (a) 2.51×10^4 (b) 0.00821 (c) 1.25×10^{-8}

29th (a) 0.0205 – 0.0215 (b) 5000

30th



31st/1st April (a) 17, 31, 57

(c) $a = 6, b = 9$