

November 2008 Paper 1 (Foundation) – Non-Calculator

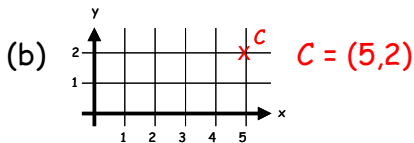
Actual answers in RED

1 (a) 3 (b) Cat (c) 22

2 (a) 9374
(b) Sixty-two thousand, five hundred
(c) 80 (eighty)
(d) 2200 (e) 7000

3 (a) 6.8cm (b) (measure 3.4cm)
(c) (use compasses with distance = 4cm)


4 (a) (i) A = (1,4) (ii) B = (3,0)



5 (a) (i) km (ii) litres
(b) (i) 5cm = 50 mm (ii) 4000g = 4kg

6 (a) any 2 of: 3, 5, 9, 11
(b) either 5+10 or 6+9
(c) possible factors of 12: 3 or 6
(d) multiples of 4: 8 or 16
(e) $5^2=25$ not 10 James has multiplied by 2 instead of 5

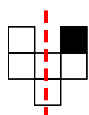
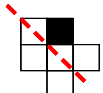
7 (a) trapezium (1 pair of parallel sides)
(b) $x=60^\circ$ (c) y is an obtuse angle

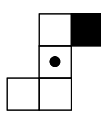
8 (a)  (b)

Patt. No.	1	2	3	4	5
No. of Sq.	5	9	13	17	21

(c) (add 4 each time) no. of squares = 41

9 (a) cost = $3 \times 60p = \text{£}1.80$
(b) cost + $\text{£}2.70 + 45p + 60p = \text{£}3.75$
change = $\text{£}5 - \text{£}3.75 = \text{£}1.25$
(c) $\frac{2}{3} \times 60 = \frac{120}{3} = 40p$

10 (a)  or  (b)

11 (a) Colin's age is $n-3$
(b) Daniel's age is $2n$ 

12 (a) Perimeter = $10+20+10+20 = 60\text{cm}$
(b) Area = $10 \times 20 = 200\text{cm}^2$

13 (a) $2 \times (11+9) = 2 \times 20 = 40$
(b) $3 \times 5 + 4 = 15 + 4 = 19$
(c) $20 - 5 \times 3 = 20 - 15 = 5$

14 (a) $4p+3r = 4 \times 5 + 3 \times 2 = 20+6 = 26$
(b) n is even, so $n+1$ is an odd number

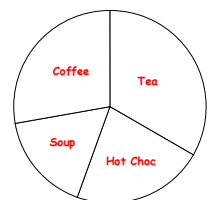
15 (a) if AB is straight, the angles add to 180° but $120^\circ + 50^\circ = 170^\circ$
(b) $70 + 130 + 100 = 300$ $360 - 300 = 60^\circ$

16 (a) Russia 92, Australia 16
(b) 38 (c) Italy
(d) $\frac{9}{30} = \frac{3}{10}$

(e) Ratio = 48:32 (divide by 8) = 6:4
(divide by 2) = 3:2

17 (a) Julie wants 12 tins. She buys 8 and gets 4 free. She pays $8 \times 40p = \text{£}3.20$
(b) 9 out of 12 ie $\frac{9}{12} \times 100 = \frac{3}{4} \times 100 = 75\%$
(c) $15\% \text{ of } \text{£}20 = \frac{15}{100} \times 20 = 30 \div 10 = 3$ Sale price = $\text{£}20 - 3 = \text{£}17$

18 Total drinks = 90 $360^\circ \div 90 = 4^\circ$
So 4° for each drink
hot choc $20 \times 4^\circ = 80^\circ$
soup $15 \times 4^\circ = 60^\circ$
coffee = 100° tea = 120°



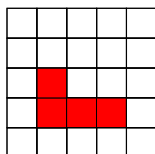
Measure accurately using protractor!

19 (a) $5bc + 2bc - 4bc = 3bc$
(b) $4x + 3y - 2x + 2y = 2x + 5y$
(c) $m \times m \times m = m^3$
(d) $3n \times 2p = 6np$
(e) $5m + 10 = 5(m+2)$

20 In this order: B, D, C, A, F, E

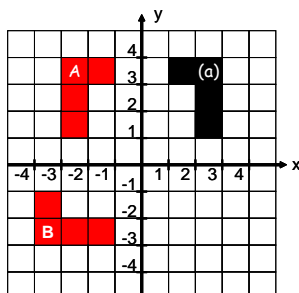
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View of solid from
direction A

22



(b) $A \rightarrow B$ Rotation 90° anticlockwise about the origin (0,0)

23 5:3 Total = $5 + 3 = 8$ parts

$$£48 \div 8 = £6$$

$$\text{Sidra gets } 5 \times £6 = \text{£}30$$

$$\text{Gemma gets } 3 \times £6 = \text{£}18$$

$$£30 - £18 = £12$$

Sidra gets £12 more

24 (a) 1. Question not specific enough - gives no length of time eg per week, per month

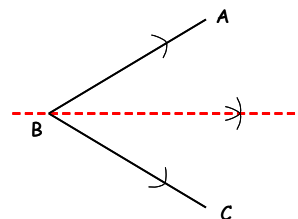
2. Answers should be specific numbers

3. Does not give box for "not at all"

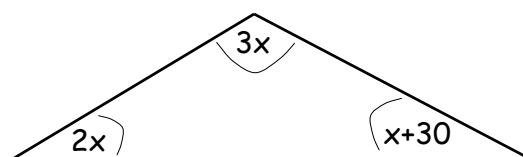
(b) How many times, on average, do you go to the cinema each month?

☐ none ☐ 1 - 2 ☐ 3 - 4 ☐ More than 4

25



Put compass point on B and draw arcs on the lines as shown. Put compass point on each arc in turn and draw arcs between the 2 lines so that they make a cross as shown. Draw in line bisecting angle.



26

Angles of triangle add to 180°

$$\text{So } 2x + 3x + x + 30^\circ = 180^\circ$$

$$\Rightarrow 6x + 30^\circ = 180^\circ$$

$$\Rightarrow 6x = 150^\circ$$

$$\Rightarrow x = 150 \div 6$$

$$\Rightarrow x = 25^\circ$$