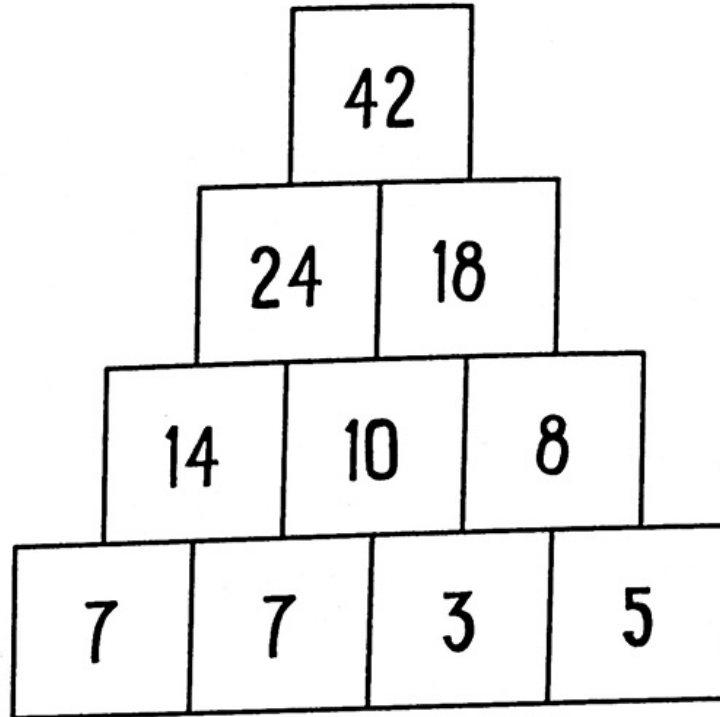


All
of the
ANSWERS

ANSWERS

MATHS PUZZLE 1



MATHS PUZZLE 2

1	×	4	=	4
×		+		
2	+	3	=	5
=		=		
2		7		

MATHS PUZZLE 3

There are 31 cubes:

6 on the first layer (counting down from the top),
11 on the second layer and 14 on the third layer

MATHS PUZZLE 4

a) 29 27 25 23 21 19 17

Subtract 2 at each step

b) 23 26 29 32 35 38 41

Add 3 at each step

c) 128 64 32 16 8 4 2

Divide by 2 at each step

d) 7 13 19 25 31 37 43

Add 6 at each step

e) 7 8 10 13 17 22 28

Add 1 in the first step, 2 in the second step, 3 in the third step, and so on

ANSWERS

MATHS PUZZLE 5

$Apple = 1$

$Banana = 3$

$Cherry = 2$

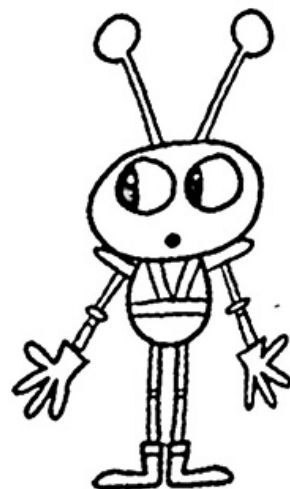
MATHS PUZZLE 6

$3 \times 3 = 9$

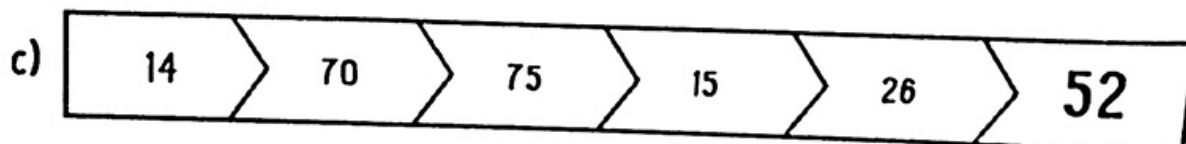
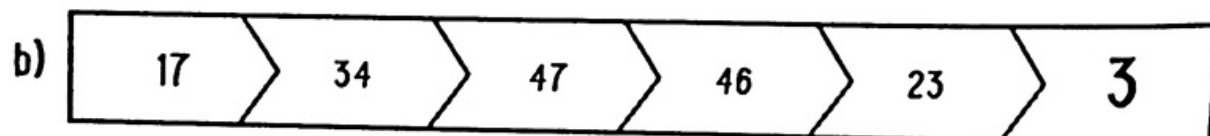
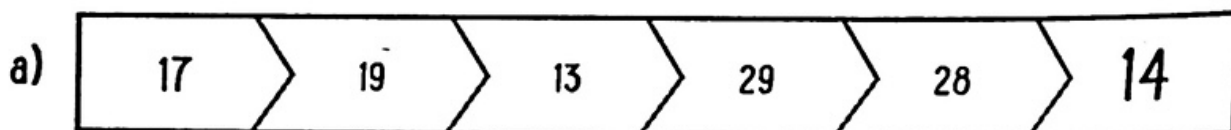
$5 \times 5 = 25$

$6 \times 2 = 12$

$4 + 9 = 13$



MATHS PUZZLE 7



MATHS PUZZLE 8

	5	5	6	4	
3	2	1	4	3	7
7	3	4	2	1	3
7	4	3	1	2	3
3	1	2	3	4	7
	5	5	4	6	

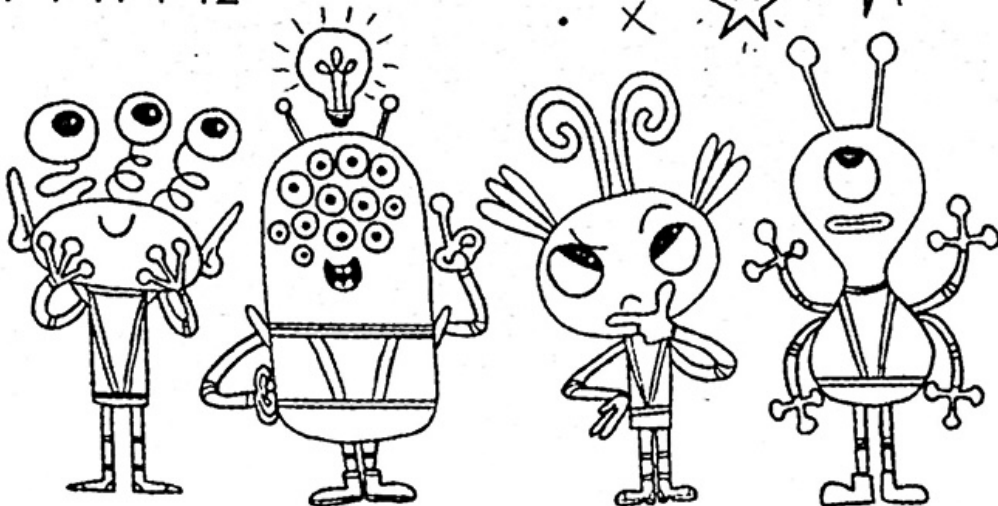
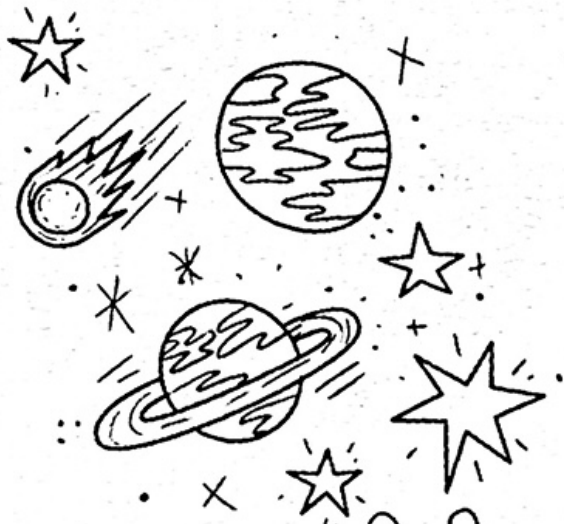
MATHS PUZZLE 9

$$18 = 7 + 11$$

$$24 = 5 + 7 + 12$$

$$31 = 4 + 5 + 10 + 12$$

$$35 = 5 + 7 + 11 + 12$$



ANSWERS

MATHS PUZZLE 10

$12 \times 11 = 132$

$4 \times 4 = 16$

$42 - 8 = 34$

$2 + 3 = 5$

$120 \div 12 = 10$

$4 \times 12 = 48$

$72 \div 8 = 9$

$12 \times 12 = 144$

$17 + 38 = 55$

$3 \times 10 = 30$

$56 + 5 = 61$

$8 \times 6 = 48$

$32 \div 8 = 4$

$19 + 43 = 62$

MATHS PUZZLE 11

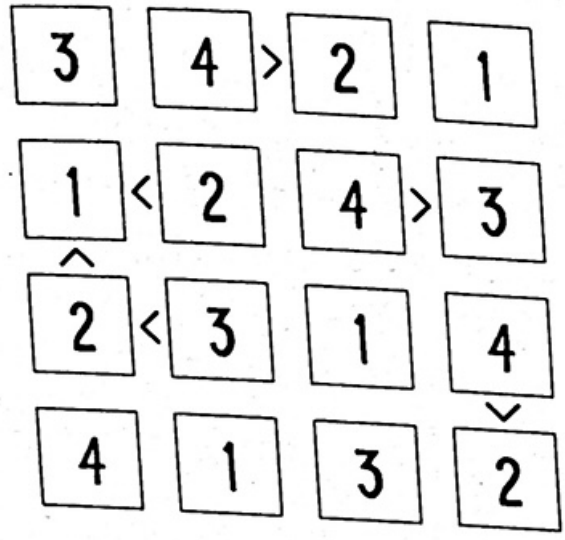
$12 = 3 + 5 + 4$

$24 = 3 + 12 + 9$

$26 = 11 + 8 + 7$

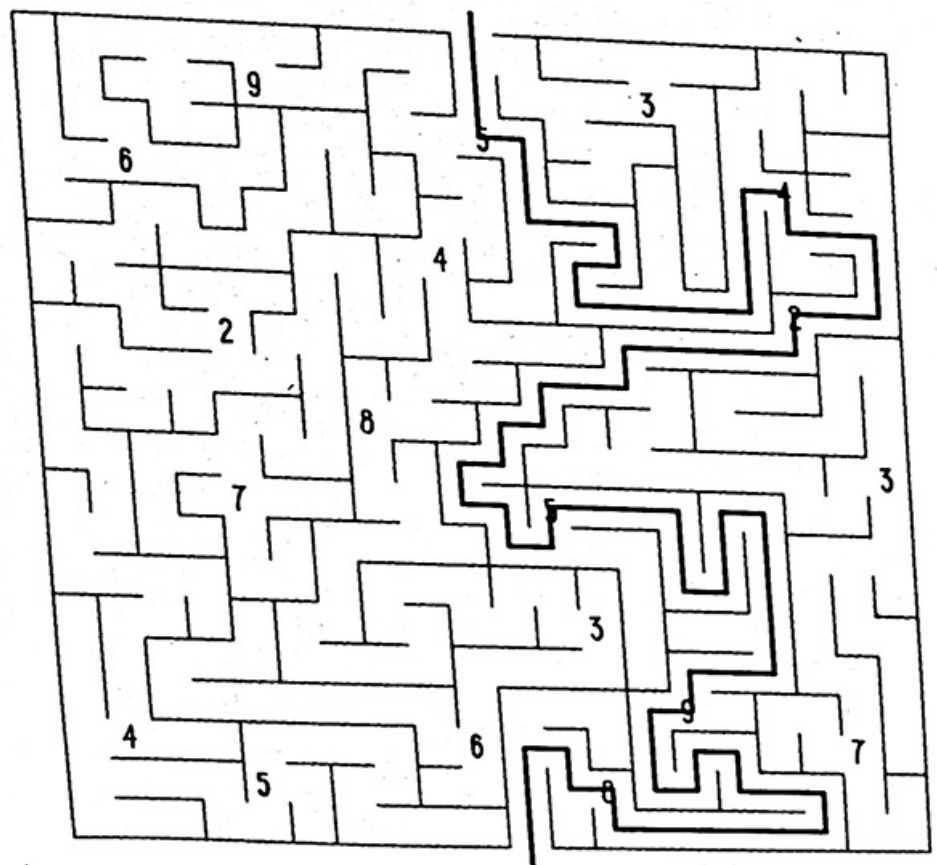


MATHS PUZZLE 12



MATHS PUZZLE 13

The total is 33:

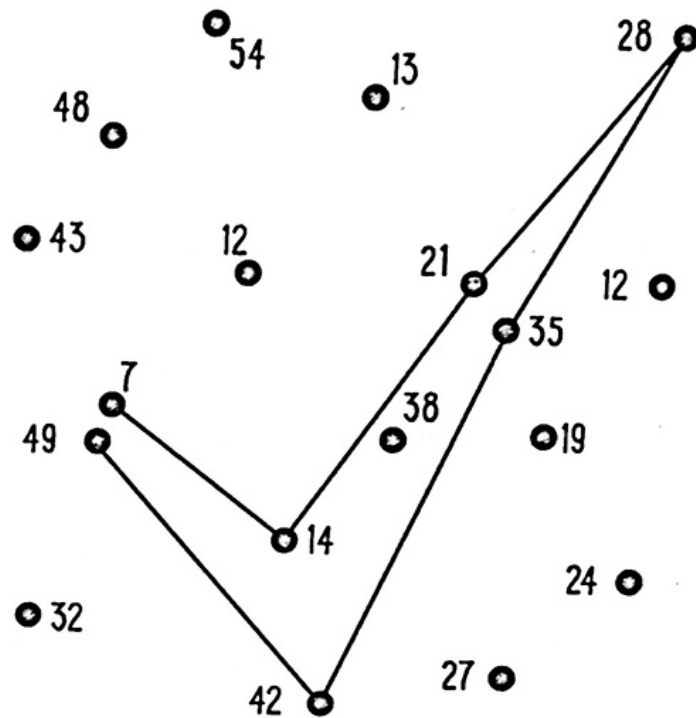


ANSWERS

MATHS PUZZLE 14

- a) 4 coins: $20 + 20 + 5 + 1$
- b) 7 coins: $1 + 1 + 5 + 10 + 10 + 20 + 20$
- c) You would have change worth 43 Distantian pence,
so 4 coins: $20 + 20 + 2 + 1$
-

MATHS PUZZLE 15



MATHS PUZZLE 16

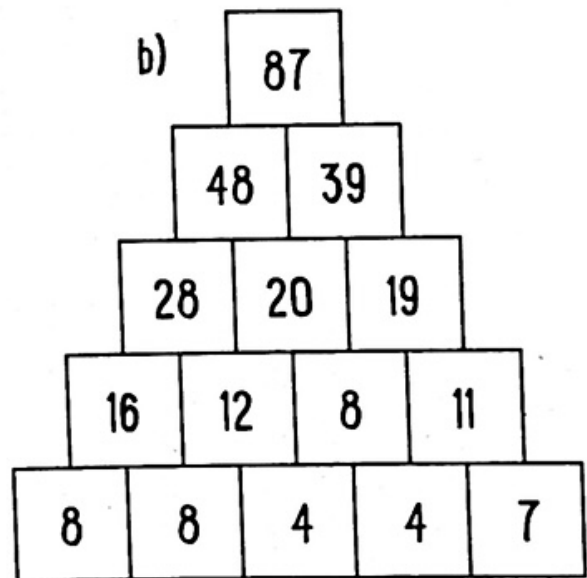
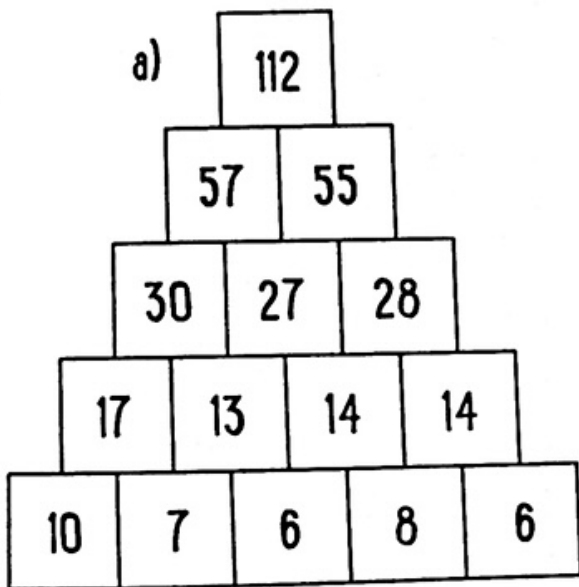
a) $\times 3$

b) $+ 7$

MATHS PUZZLE 17

3+		10+
2	1	3
3	2	1
1	5+	
	3	2

MATHS PUZZLE 18



ANSWERS

MATHS PUZZLE 19

$14 + 45 = 59$

$95 - 20 = 75$

$9 + 11 = 20$

$28 - 20 = 8$

$51 + 26 = 77$

$36 + 10 = 46$

$16 + 91 = 107$

$10 \times 6 = 60$

$18 \times 9 = 162$

$46 - 19 = 27$

$77 + 13 = 90$

$77 - 28 = 49$

$8 \times 11 = 88$

$12 \times 10 = 120$

MATHS PUZZLE 20

Delete the 1 from the 17 to give: $3 \times 7 + 4 = 25$

Delete the 3 from the 23 to give: $12 + 2 + 34 = 48$

Delete the 2 from the 25 to give: $36 + 43 + 5 = 84$

Delete the 1 from the 10 to give: $0 \times 12 \times 14 \times 16 \times 18 = 0$

MATHS PUZZLE 21

a) $(3 + 4) \times 7 = 49$

b) $(4 - 1) \times 5 = 15$

MATHS PUZZLE 22

a) 7:30pm

c) 2:20am

b) 6:30am

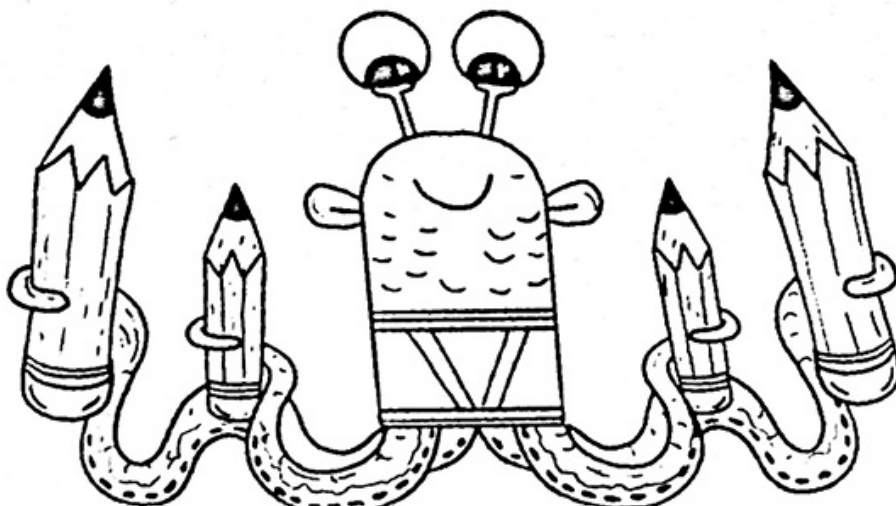
d) 7:15am

MATHS PUZZLE 23

a) Two of them – 5:30 on the grandfather clock, and 8:30 on the clock in the middle of the first page

b) 11:05 – on the pocket watch, and on the second clock at the top of the second page

c) Two clocks – 7:15 on the stopwatch, and 7:58 on the large digital clock display



ANSWERS

MATHS PUZZLE 24

5			
			3
3			5

MATHS PUZZLE 25

Γ_6 4	2	Γ_3 1	Γ_9 3
Γ_6 1	Γ_3 3	2	4
3	Γ_5 1	Γ_4 4	2
2	4	Γ_4 3	1

MATHS PUZZLE 26

Amella is 14, Bella is 11 and Connor is 7.

MATHS PUZZLE 27

	6 ↘	6 ↘	3 ↘		
	2	4	1	2	8
2 ↖	3	4	1	2	6
4 ↖	1	2	3	4	1
9 ↖	4	3	2	1	
		4 ↖	4 ↖	7 ↖	

MATHS PUZZLE 28

	9	20			11	4
17	8	9		11	8	3
4	1	3	6	2	3	1
	13	8	1	4	13	
	15	16	7	2	1	4
23	6	9	8	9	1	8
16	9	7		17	8	9

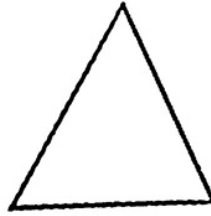
ANSWERS

MATHS PUZZLE 29



Scalene

21



Equilateral

51



Right-angled

18

MATHS PUZZLE 30

There are 21 rectangles in total. If you found more than 18, you've done incredibly well.

MATHS PUZZLE 31

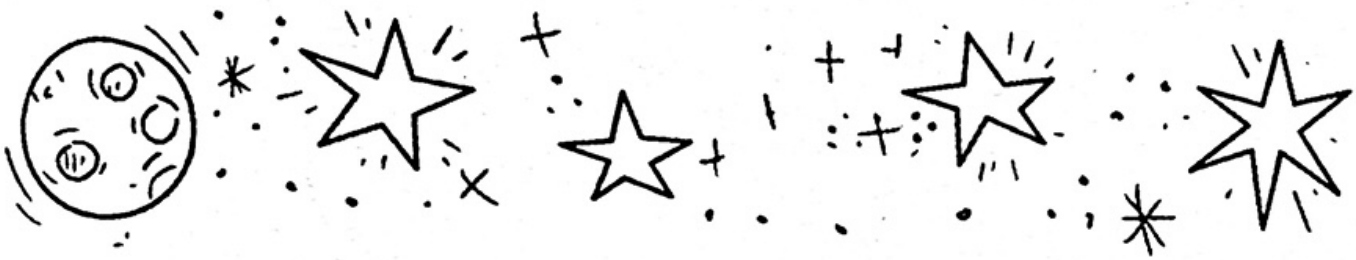
$$17 - 4 = 13$$

There are three ways of fixing the second part of the puzzle. If you found any two of the following, then you are correct:

$$\begin{array}{l} 2 \times 30 = 60 \\ 3 \times 30 = 90 \\ 2 \times 40 = 80 \end{array}$$

MATHS PUZZLE 32

- a) $18/40$ rockets, which simplifies to $9/20$
- b) $7/22$ rockets
- c) $8/18$ rockets, which simplifies to $4/9$
- d) $5/12$ rockets



MATHS PUZZLE 33

1	3+	10+	
1	2	4	3
7+			3+
4	1	3	2
	9+	3+	
3	4	2	1
			4
2	3	1	4

ANSWERS

MATHS PUZZLE 34

a): 64 – all the other numbers are odd

b): 21 – all the other numbers are prime numbers

MATHS PUZZLE 35

$$23:25 - 04:10 = \boxed{19:15}$$

$$13:05 - 04:35 = \boxed{08:30}$$

$$06:10 + 00:40 = \boxed{06:50}$$

$$16:55 - 06:50 = \boxed{10:05}$$

$$05:45 - 03:05 = \boxed{02:40}$$

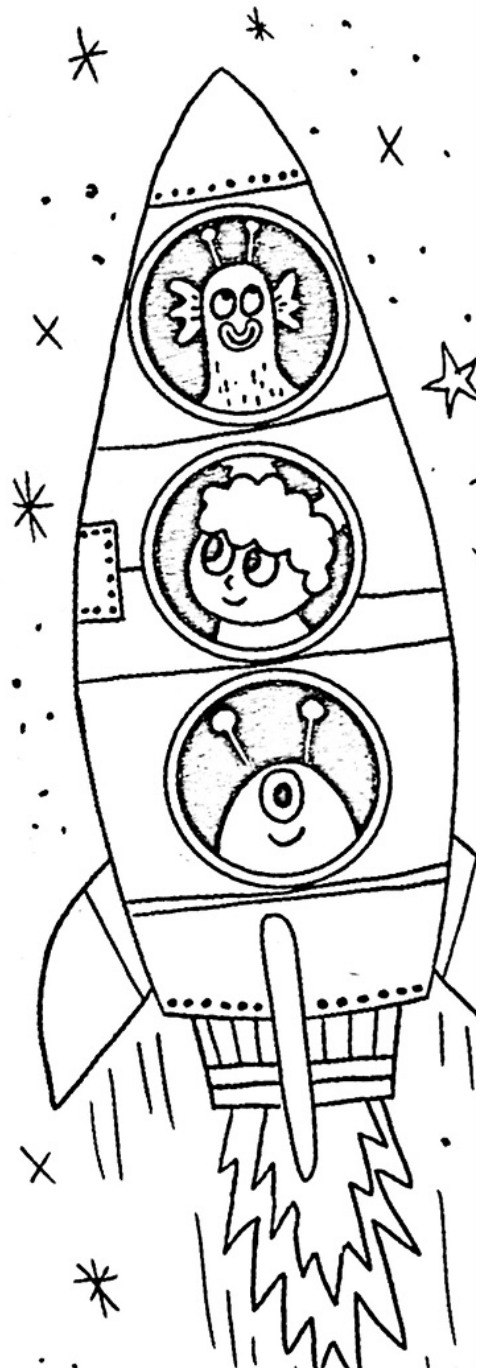
$$23:00 - 04:45 = \boxed{18:15}$$

$$13:25 - 05:45 = \boxed{07:40}$$

$$03:45 + 07:15 = \boxed{11:00}$$

$$15:35 - 03:25 = \boxed{12:10}$$

$$11:00 + 10:25 = \boxed{21:25}$$



ANSWERS

MATHS PUZZLE 34

a): 64 – all the other numbers are odd

b): 21 – all the other numbers are prime numbers

MATHS PUZZLE 35

$$23:25 - 04:10 = \boxed{19:15}$$

$$13:05 - 04:35 = \boxed{08:30}$$

$$06:10 + 00:40 = \boxed{06:50}$$

$$16:55 - 06:50 = \boxed{10:05}$$

$$05:45 - 03:05 = \boxed{02:40}$$

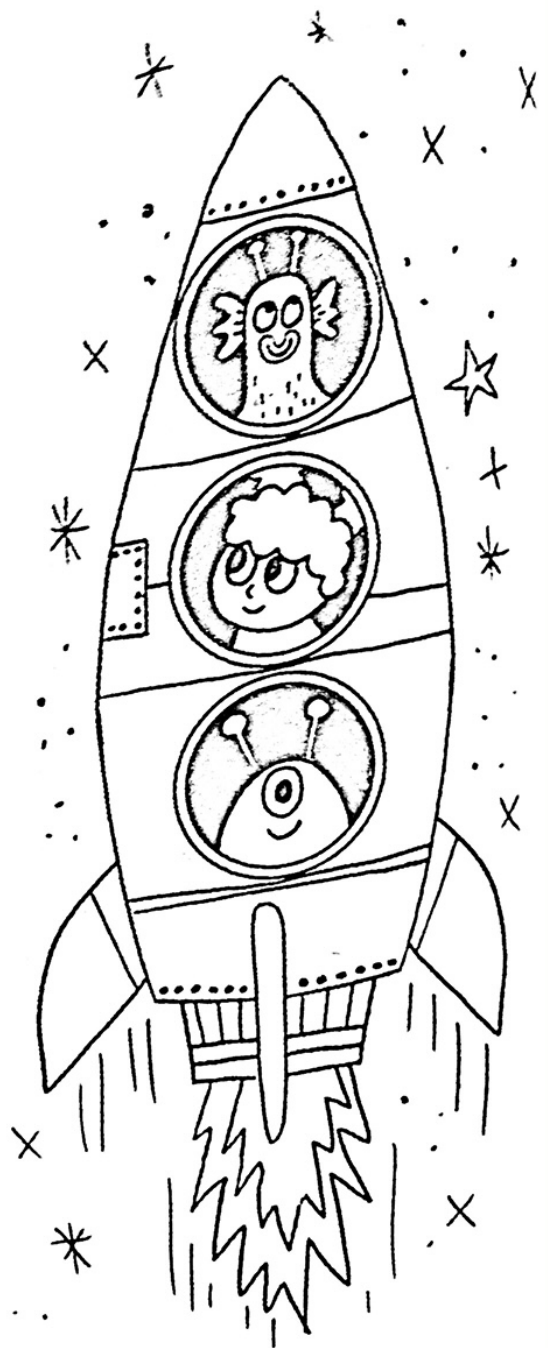
$$23:00 - 04:45 = \boxed{18:15}$$

$$13:25 - 05:45 = \boxed{07:40}$$

$$03:45 + 07:15 = \boxed{11:00}$$

$$15:35 - 03:25 = \boxed{12:10}$$

$$11:00 + 10:25 = \boxed{21:25}$$



MATHS PUZZLE 36

a) $XXX - XII = XVIII$

b) $XIX - V = XIV$

c) $LX + XL = C$

d) $VII + VI + V + IV + III = XXV$

e) $IX \times XI = XCIX$ (although IC is mathematically correct too, the Romans would have written it as XCIX)

f) $I + V + X + L + C = CLXVI$

MATHS PUZZLE 37

4	2	6	3	1	5
5	3	1	2	6	4
3	1	5	6	4	2
6	4	2	5	3	1
1	5	3	4	2	6
2	6	4	1	5	3

ANSWERS

MATHS PUZZLE 38

a) $4 \div 4 + 4 + 4 + 4 =$

$4 \div 4$ gives you 1, then add on 4 three times to result in 13.

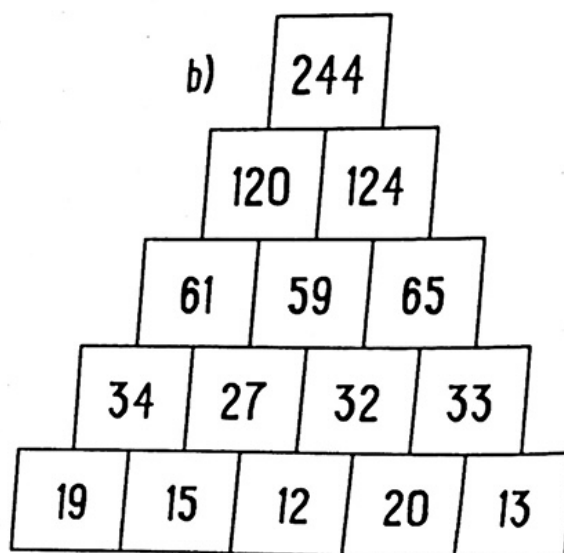
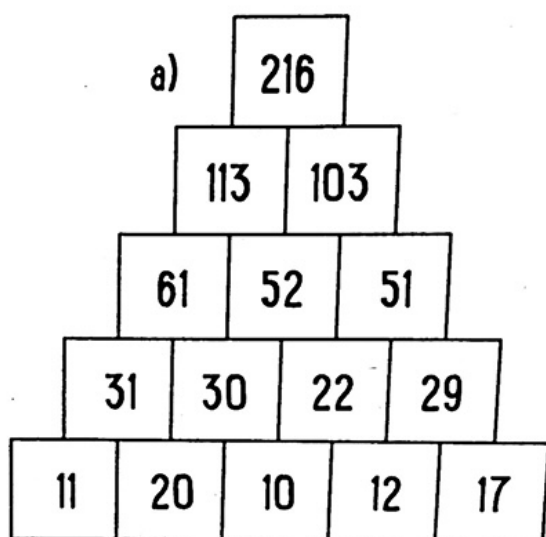
b) $4 \times 4 + 4 + 4 + 4 =$

4×4 gives you 16, then add three lots of 4 to result in a total of 28.

c) $44 \div 4 =$

This one is a bit sneakier because you press the 4 key twice to get 44. Then you just divide by 4 to result in 11.

MATHS PUZZLE 39



MATHS PUZZLE 40

$72 \square \div 6 = 12$

$10 \square + 49 = 59$

$64 \square - 8 = 56$

$4 \square \times 6 = 24$

$39 \square + 8 = 47$

$56 \square - 2 = 54$

$44 \square + 16 = 60$

$27 \square - 2 = 25$

$12 \square \div 2 = 6$

$5 \square \times 3 = 15$

$20 \square \div 5 = 4$

$24 \square \div 6 = 4$

$58 \square - 3 = 55$

$15 \square + 68 = 83$

MATHS PUZZLE 41

a) Dice a, c, d and e could be fives

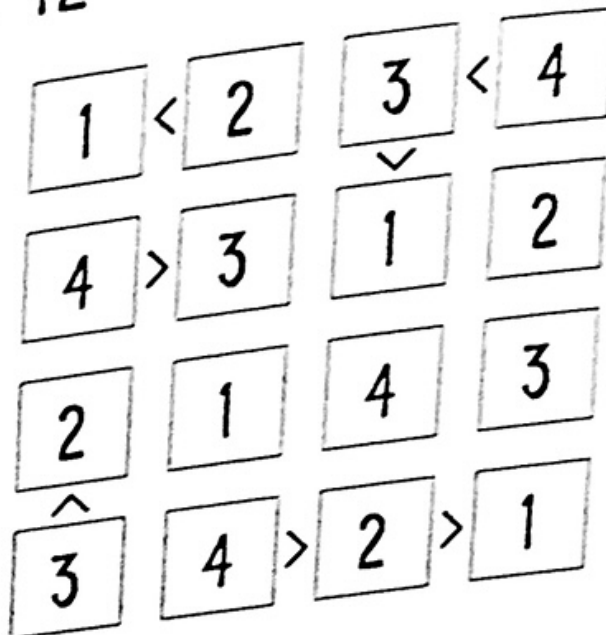
b) Only dice c could be a two

c) The highest possible total value is $5 + 6 + 6 + 6 + 6 = 29$

d) The lowest possible total value is $1 + 6 + 2 + 4 + 4 = 17$

ANSWERS

MATHS PUZZLE 42



MATHS PUZZLE 43

- 29
- 1) $3 + 5 + 6 + 7 + 8$ (remove 11)
 - 2) $3 + 7 + 8 + 11$ (remove 5, 6)
 - 3) $5 + 6 + 7 + 11$ (remove 3, 8)

- 24
- 1) $3 + 6 + 7 + 8$ (remove 5, 11)
 - 2) $5 + 8 + 11$ (remove 3, 6, 7)
 - 3) $6 + 7 + 11$ (remove 3, 5, 8)

- 16
- 1) $3 + 5 + 8$ (remove 6, 7, 11)
 - 2) $3 + 6 + 7$ (remove 5, 8, 11)
 - 3) $5 + 11$ (remove 3, 6, 7, 8)

MATHS PUZZLE 44

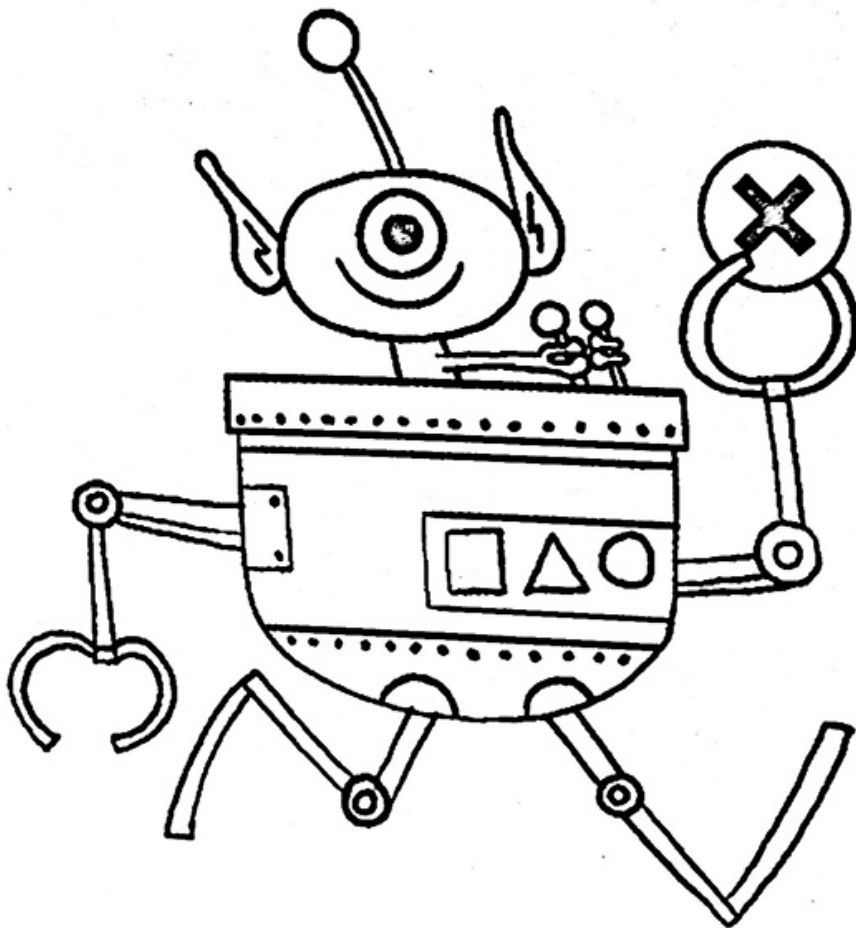
$$32 = 8 + 7 + 17$$

$$49 = 19 + 12 + 18$$

$$53 = 16 + 20 + 17$$

MATHS PUZZLE 45

- a) 55, on the bottom-left building. You can just count the rows (11) and columns (5) and multiply them together to get this total.
- b) 8 lit windows, in the third column of the top-right building.



ANSWERS

MATHS PUZZLE 46

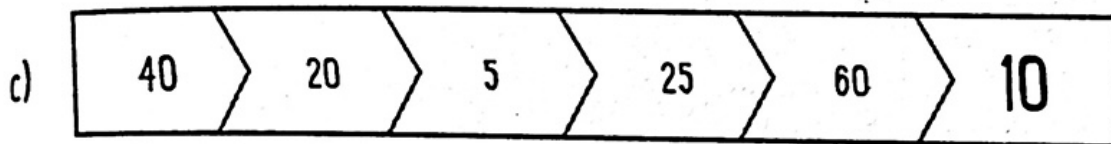
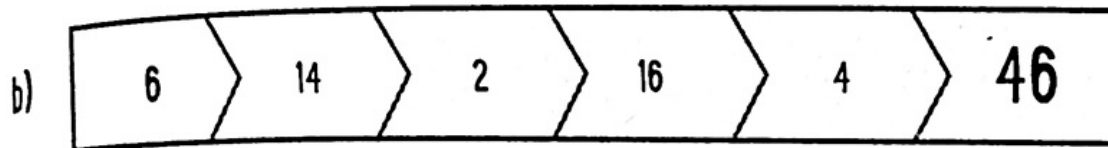
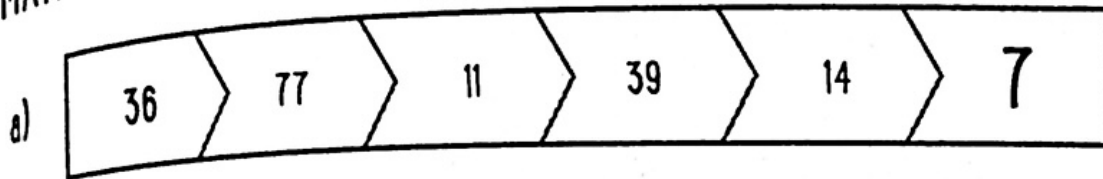
a) On Monday I ate 2 apples, on Tuesday 4 apples, on Wednesday 8 apples, on Thursday 16 apples and on Friday 32 apples. This means that overall I ate 62 apples: $2+4+8+16+32$. That's a lot of apples!

b) 48 apples: A 28-day month always has exactly 4 weeks in it, so there are 20 weekdays and 8 weekend days. That means I ate $(20 \times 2) + (8 \times 1) = 40 + 8 = 48$ apples.

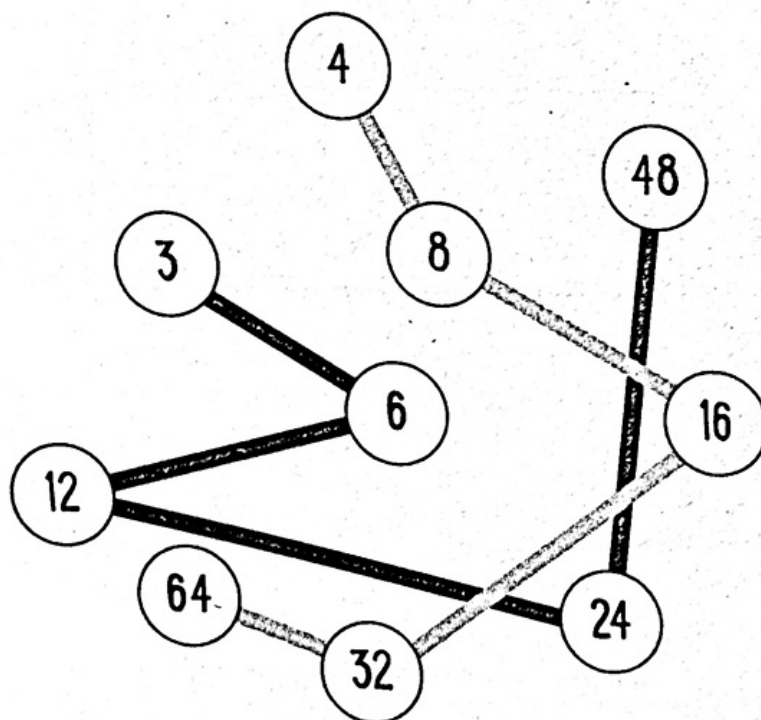
MATHS PUZZLE 47

	9	3	9	9	9	3	
9	5	1	3	4	6	2	12
12	4	2	6	5	3	1	9
8	3	4	1	6	2	5	13
13	6	5	2	3	1	4	8
9	1	3	5	2	4	6	12
12	2	6	4	1	5	3	9
	3	9	9	3	9	9	

MATHS PUZZLE 48



MATHS PUZZLE 49



Both paths use the sequence $\times 2$.

ANSWERS

MATHS PUZZLE 50

a) 5 coins: $20 + 20 + 20 + 2 + 1$

b) 12 coins: $1 + 1 + 1 + 2 + 2 + 5 + 5 + 10 + 10 + 10 + 20 + 20$

c) 3 coins: You would have change of 27 Yonderian pence,
so $20 + 5 + 2$

MATHS PUZZLE 51

^{r7} 4	^{r6} 2	6	^{r17} 5	^{r4} 3	1
3	^{r1} 1	^{r8} 5	6	4	2
^{r8} 2	6	3	^{r5} 4	1	^{r5} 5
^{r1} 1	^{r9} 5	4	^{r4} 3	^{r8} 2	6
^{r11} 5	3	2	1	^{r6} 6	^{r7} 4
^{r10} 6	4	1	^{r7} 2	5	3

MATHS PUZZLE 52

a) 52 days

b) 86 days (today is the 5th of February)

c) 21 days

ANSWERS

MATHS PUZZLE 50

a) 5 coins: $20 + 20 + 20 + 2 + 1$

b) 12 coins: $1 + 1 + 1 + 2 + 2 + 5 + 5 + 10 + 10 + 10 + 20 + 20$

c) 3 coins: You would have change of 27 Yonderian pence,
so $20 + 5 + 2$

MATHS PUZZLE 51

^{r7} 4	^{r8} 2	6	^{r17} 5	^{r4} 3	1
3	^{r1} 1	^{r8} 5	6	4	2
^{r8} 2	6	3	^{r5} 4	1	^{r5} 5
^{r1} 1	^{r9} 5	4	^{r4} 3	^{r8} 2	6
^{r11} 5	3	2	1	^{r8} 6	^{r7} 4
^{r10} 6	4	1	^{r7} 2	5	3

MATHS PUZZLE 52

a) 52 days

b) 86 days (today is the 5th of February)

c) 21 days

MATHS PUZZLE 53

9	+	8	+	7	=	24
+		÷		×		
6	×	4	÷	3	=	8
+		÷		-		
5	×	2	-	1	=	9
=		=		=		
20		1		20		

MATHS PUZZLE 54

The circle weighs the MOST

The square weighs the LEAST

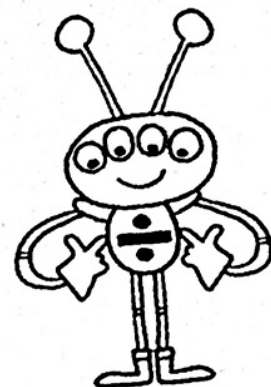
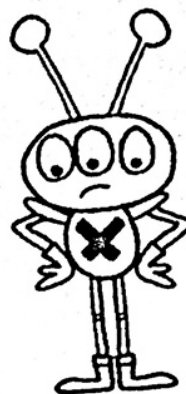
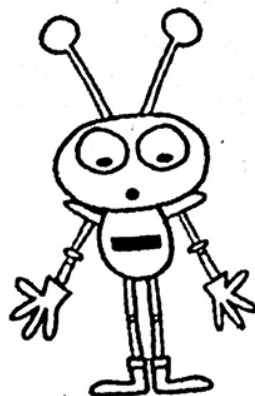
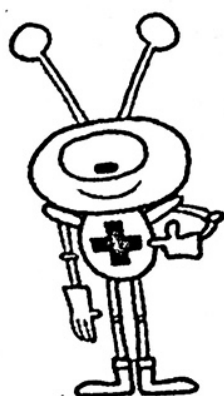
MATHS PUZZLE 55

Apple = 5

Banana = 4

Cherry = 7

Dragon fruit = 3



ANSWERS

MATHS PUZZLE 56

a) 1 hour 15 minutes: 30 minutes + (3 x 15 minutes)

1500g (1.5kg)

b) I will need 15 posts, because there needs to be one on each end of the repair as well as one between each pair of steel panels

MATHS PUZZLE 57

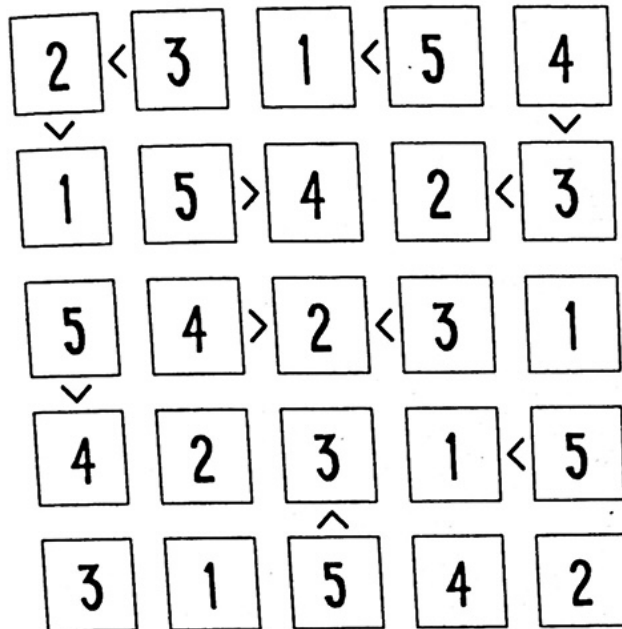
a) There are four Aces (one per suit) out of 52 cards, so the probability is $4/52 = 1/13$

b) There are 13 hearts out of 52 cards, so the probability is $13/52 = 1/4$

c) There are twelve of these cards (three per suit, with four suits) out of 52 cards, so the probability is $12/52 = 3/13$

d) The probability of the first card being a club is $13/52$. The probability of the next card being a club too is then $12/51$. So the probability of both being a club is $13/52 \times 12/51 = 1/4 \times 4/17 = 1/17$

MATHS PUZZLE 58



MATHS PUZZLE 59

a) 21 (1 + 2 + 3 + 4 + 5 + 6)

b) 30 (5 × 6)

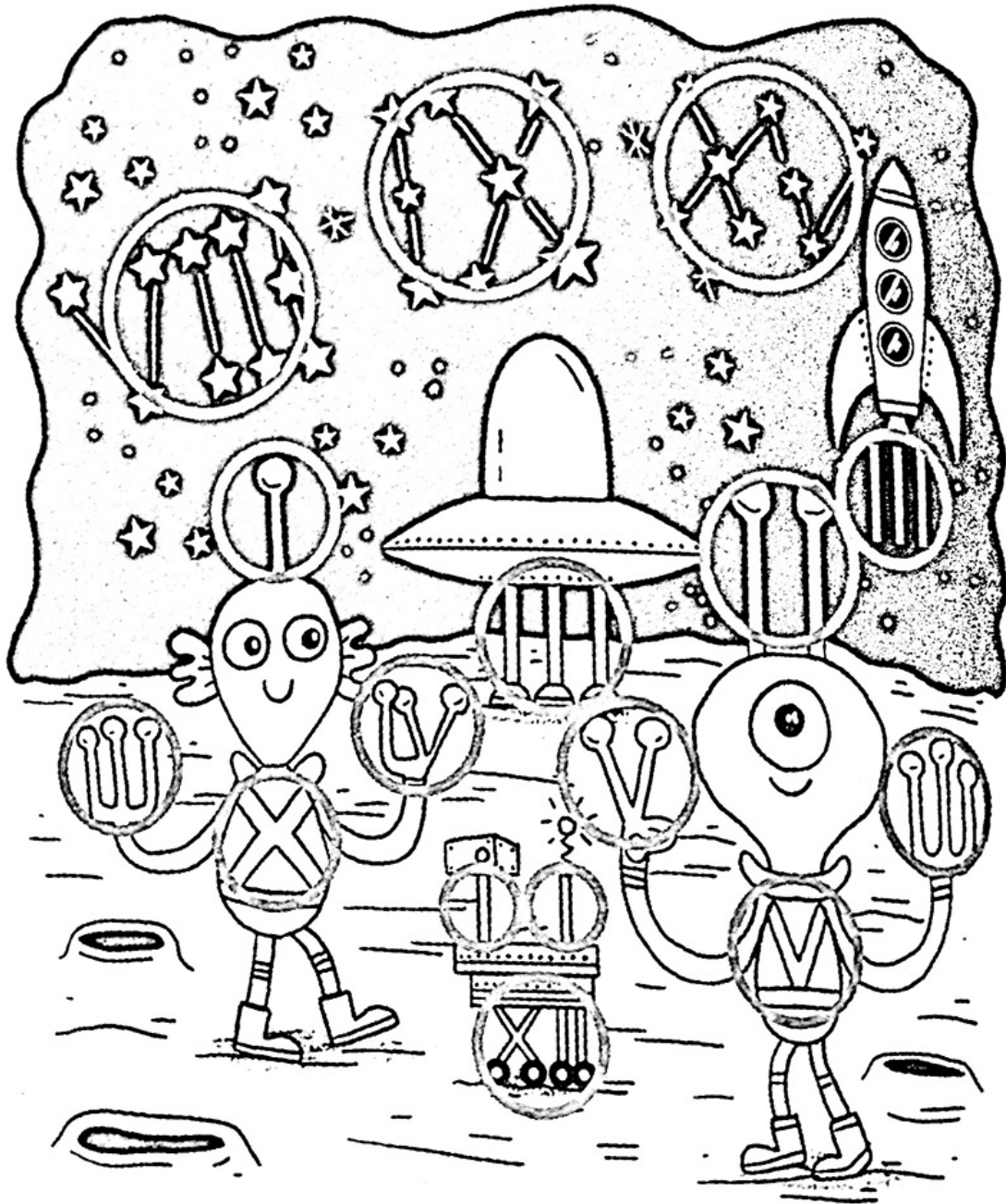
c) Three different ways (1 + 6, 2 + 5, 3 + 4), or six different ways if you keep track of which dice is which (1 + 6, 2 + 5, 3 + 4, 4 + 3, 5 + 2, 6 + 1)

d) 1 in 6 – There are 36 different possible results for two dice, keeping track of which dice is which. So 6 out of 36 results give a total of 7, meaning the probability is 6 in 36 (1 in 6)

e) 1 in 12 – There are three ways of rolling 10: 4+6, 5+5, 6+4, so the probability is 3 in 36 (1 in 12)

MATHS PUZZLE 60

The numerals add up to 85. This can be written as LXXXV.



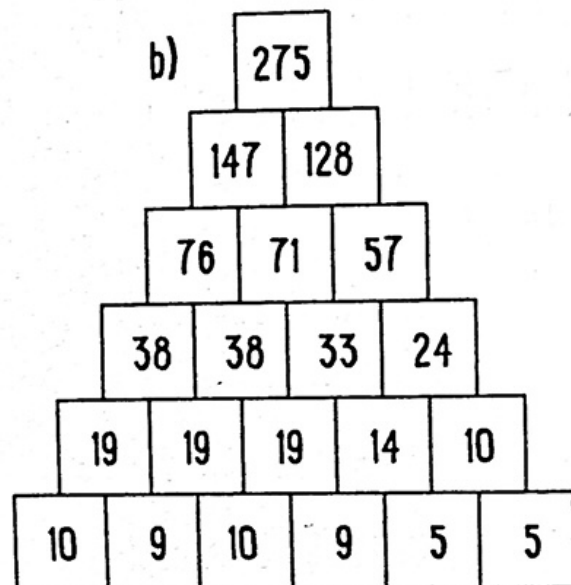
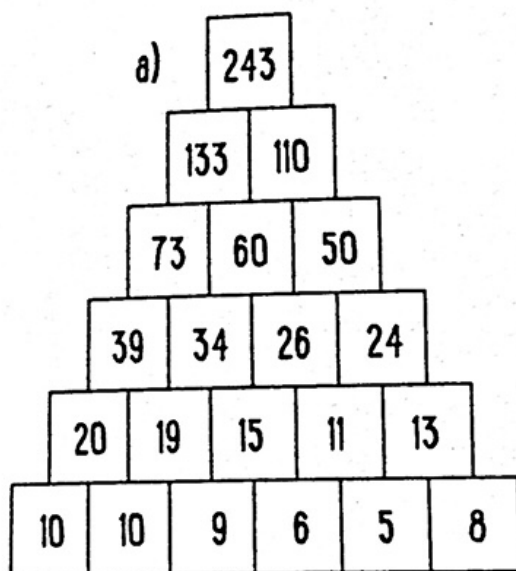
MATHS PUZZLE 61

39 cubes: 4 on the first layer (counting down from the top), 6 on the second layer, 12 on the third layer and 17 on the fourth layer

MATHS PUZZLE 62

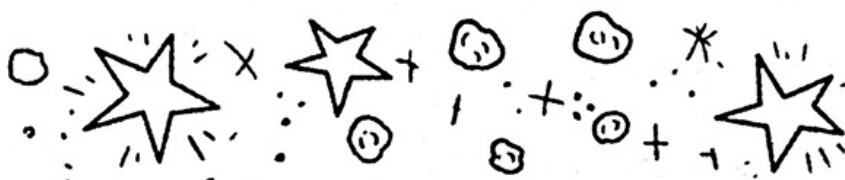
- a) $10/30$ rockets, which simplifies to $1/3$.
- b) $2/4$ rockets, which simplifies to $1/2$.
- c) $5/17$ rockets, which cannot be simplified.

MATHS PUZZLE 63



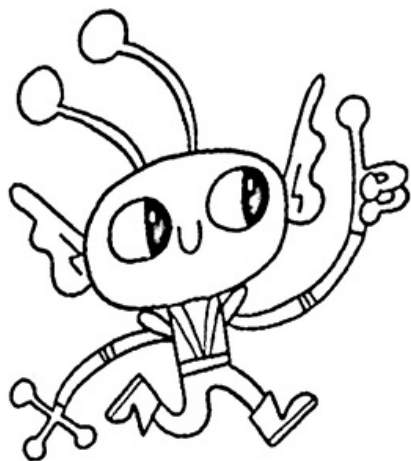
MATHS PUZZLE 64

- a) 56 – all the other numbers are multiples of 3.
- b) 35 – all the other numbers are square numbers (the result of multiplying a number by itself)



ANSWERS

MATHS PUZZLE 65



5	③	1	③	3	2	②	4	6
4	②	2	③	6	5	3	③	1
6	5	4	④	1	②	2	3	③
2	3	③	1	⑥	6	5	4	③
3	②	6	5	4	④	1	②	2
1	④	4	②	2	3	②	6	5

MATHS PUZZLE 66

a) 3 9 15 21 27 33 39

Add 6 at each step

b) 1458 486 162 54 18 6 2

Divide by 3 at each step

c) 1 4 9 16 25 36 49

Square numbers (or add 3, 5, 7, 9, 11, etc)

d) 16 8 4 2 1 $\frac{1}{2}$ $\frac{1}{4}$

Divide by 2 at each step

e) 0.3 0.6 0.9 1.2 1.5 1.8 2.1

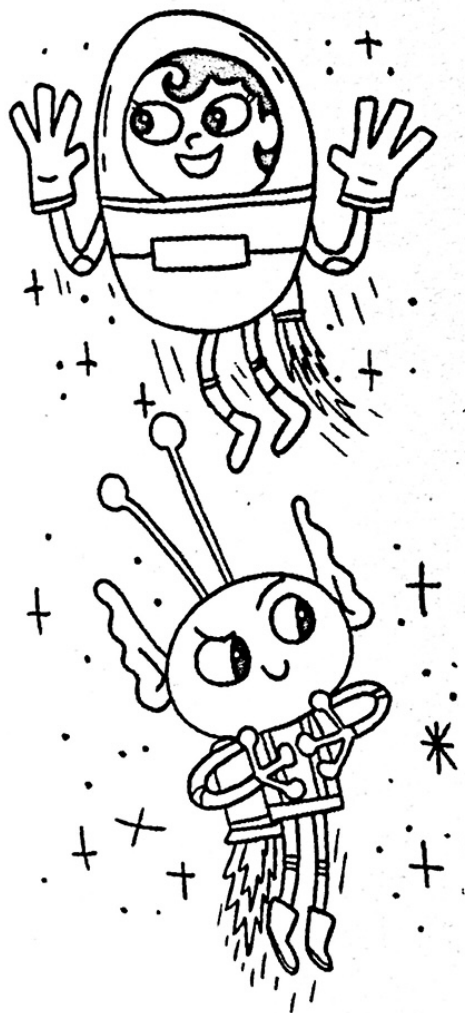
Add 0.3 at each step



MATHS PUZZLE 67

^{18*} 2	1	3	^{8*} 4
3	^{12*} 4	^{2*} 1	2
^{4*} 4	3	2	^{24*} 1
1	2	4	3

MATHS PUZZLE 68



22:25 - 17:25 = 05:00

13:20 - 05:50 = 07:30

23:55 - 12:55 = 11:00

00:50 + 08:20 = 09:10

09:20 + 02:20 = 11:40

08:25 + 03:10 = 11:35

07:55 - 04:25 = 03:30

23:25 - 00:55 = 22:30

18:10 - 16:50 = 01:20

15:25 - 08:40 = 06:45

ANSWERS

MATHS PUZZLE 69



Diamonds

17



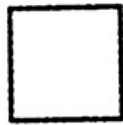
Kites

4



Parallelograms

8



Squares

30



Trapeziums

9

MATHS PUZZLE 70

a) 12.5% of the day in the lunar rover – $3/24 = 0.125$

b) 1980 degrees – A full orbit is 360 degrees, so it has rotated 5.5×360 .



MATHS PUZZLE 71

There are 42 rectangles. If you found more than 35, you've done incredibly well.

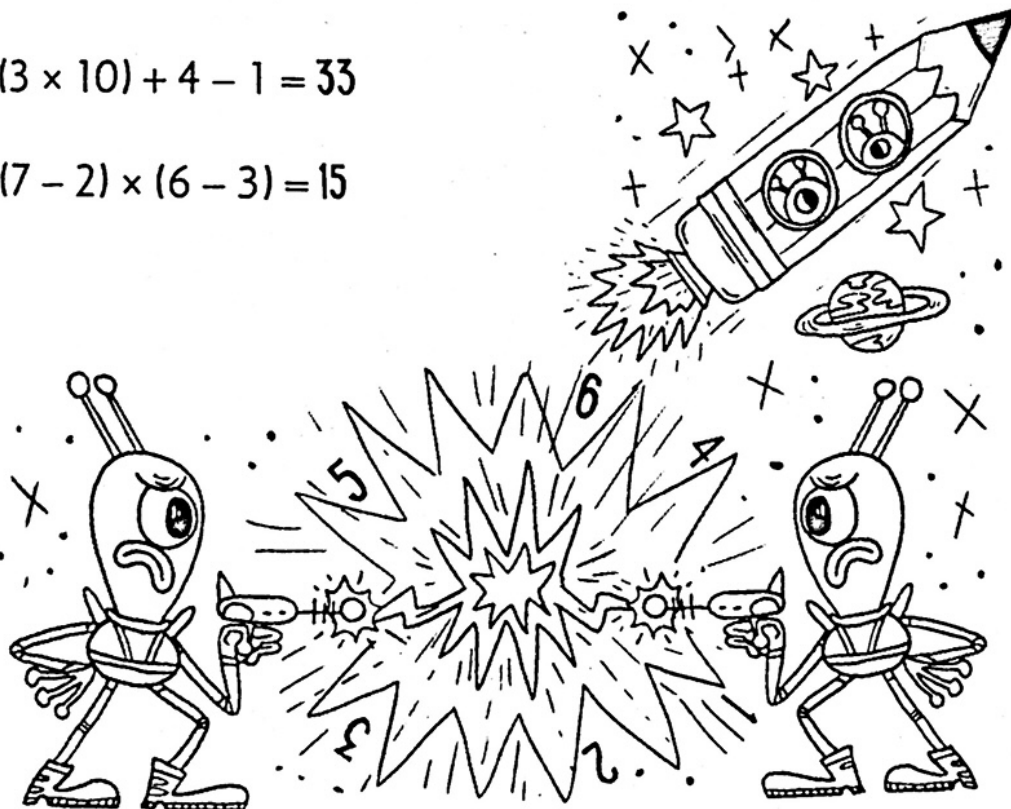
MATHS PUZZLE 72

3	5	4	2	6	1
2	6	1	3	4	5
1	4	5	6	2	3
6	2	3	1	5	4
5	3	6	4	1	2
4	1	2	5	3	6

MATHS PUZZLE 73

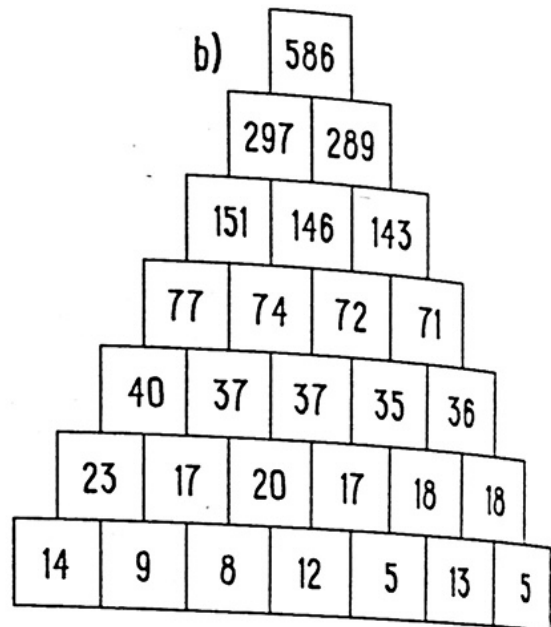
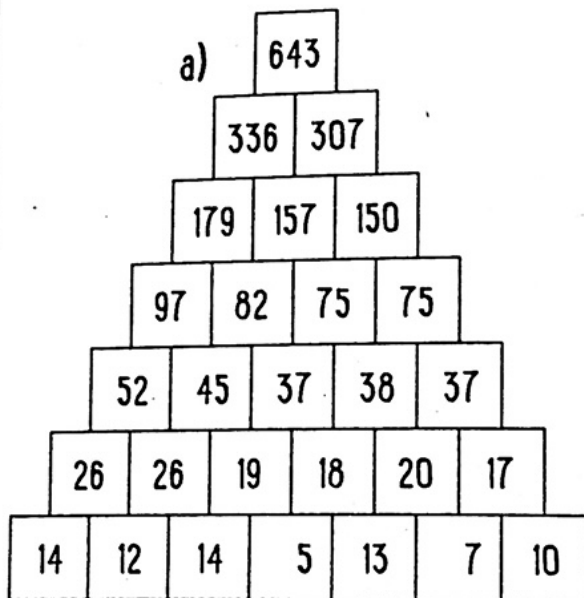
a) $(3 \times 10) + 4 - 1 = 33$

b) $(7 - 2) \times (6 - 3) = 15$



ANSWERS

MATHS PUZZLE 74



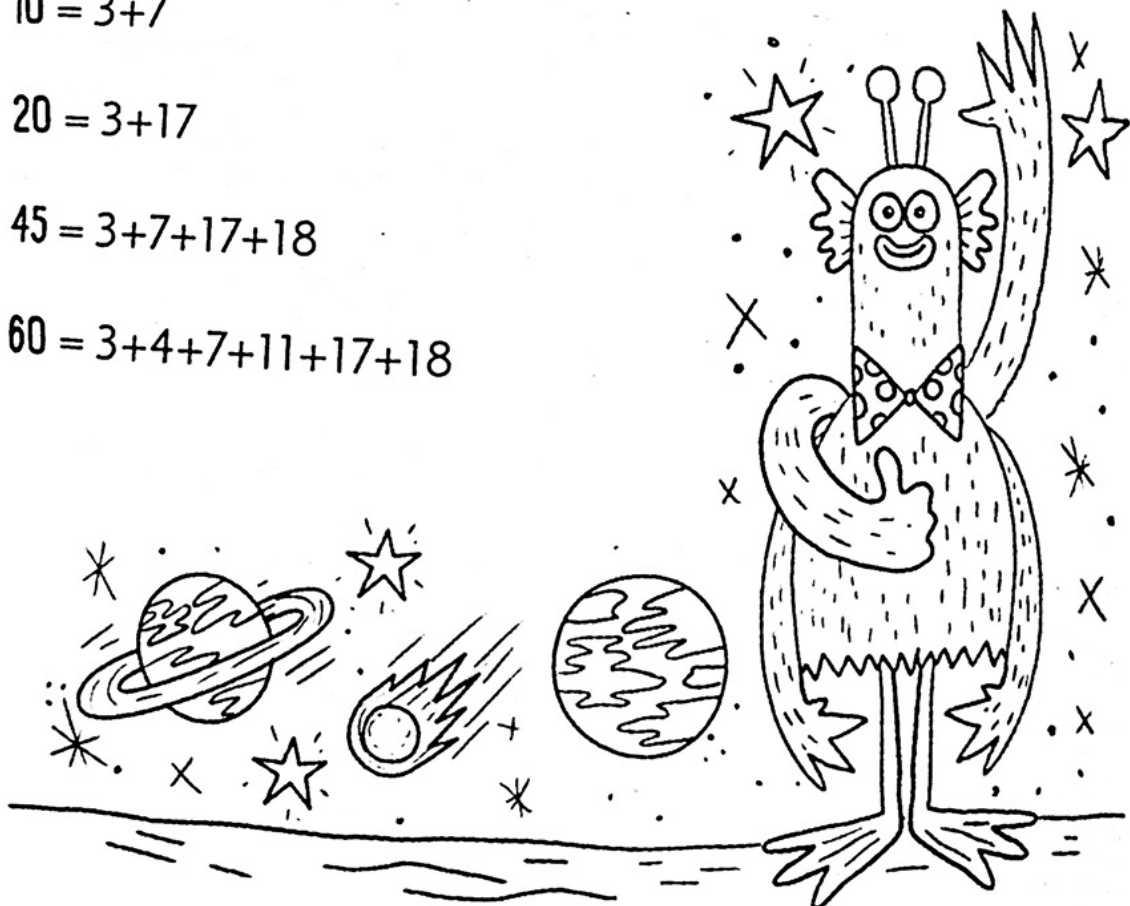
MATHS PUZZLE 75

$$10 = 3 + 7$$

$$20 = 3 + 17$$

$$45 = 3 + 7 + 17 + 18$$

$$60 = 3 + 4 + 7 + 11 + 17 + 18$$



MATHS PUZZLE 76

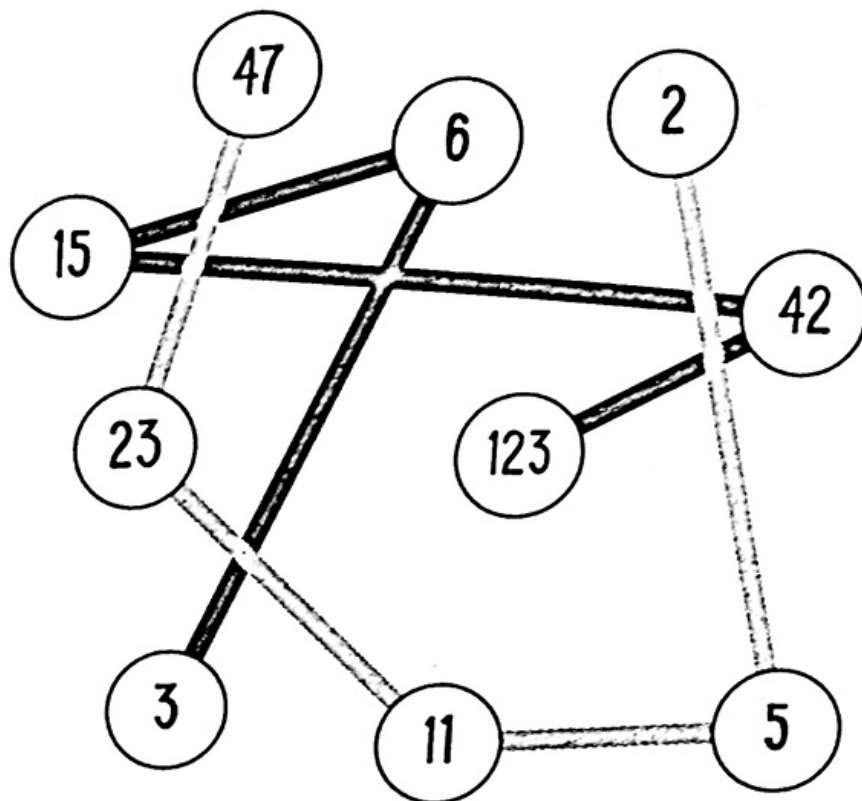
$\boxed{144} \div 9 = 16$	$126 \div \boxed{9} = 14$
$7 + \boxed{54} = 61$	$6 \times \boxed{6} = 36$
$\boxed{83} - 18 = 65$	$2 \times \boxed{8} = 16$
$95 - \boxed{7} = 88$	$\boxed{9} \times 10 = 90$
$\boxed{26} - 13 = 13$	$26 + \boxed{25} = 51$
$\boxed{53} - 27 = 26$	$50 - \boxed{14} = 36$
$\boxed{3} \times 4 = 12$	$3 \times \boxed{5} = 15$

MATHS PUZZLE 77

		16	11	11	6	6	
		2	1	3	5	4	6
2	7	6	5	4	3	1	2
7	7	1	3	6	4	2	5
9	7	5	4	2	1	6	3
17	7	4	2	5	6	3	1
21	7	3	6	1	2	5	4
		3	10	8	12	22	

ANSWERS

MATHS PUZZLE 78



Grey line sequence: $x 2 + 1$

Black line sequence: $x 3 - 3$

MATHS PUZZLE 79

The circle weighs 1kg and the square weighs 2kg.

MATHS PUZZLE 80

20% of 60 is 12

25% of 64 is 16

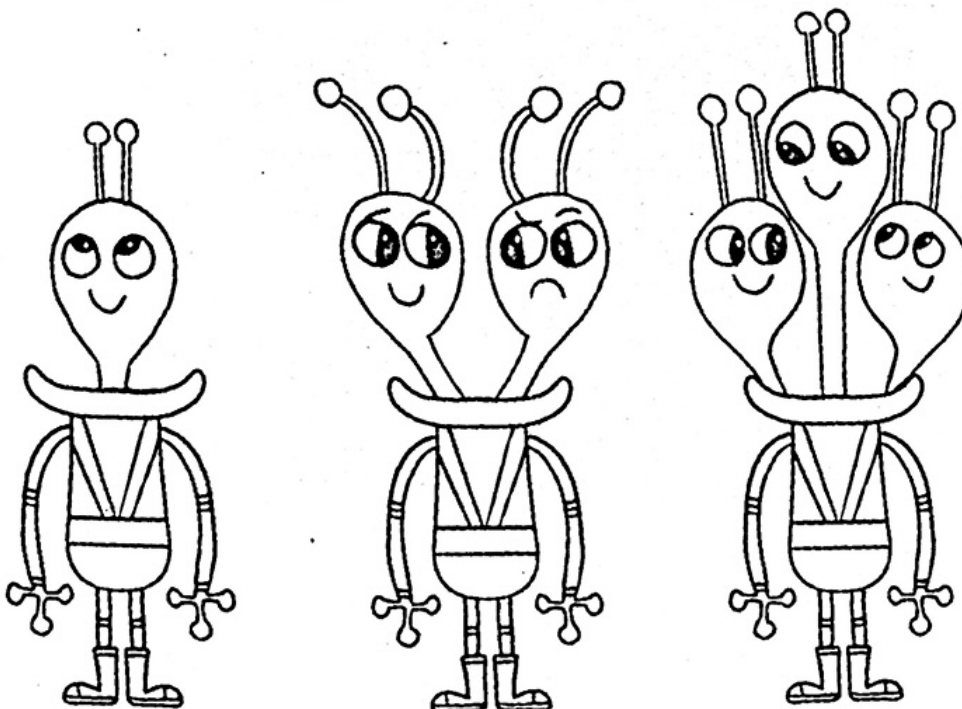
30% of 150 is 45

50% of 40 is 20

75% of 32 is 24

MATHS PUZZLE 81

$£21.60 - £1.42 =$	<input type="text" value="£20.18"/>	$£16.50 - 76p =$	<input type="text" value="£15.74"/>
$£2.17 - 76p =$	<input type="text" value="£1.41"/>	$£50 - £3.88 =$	<input type="text" value="£46.12"/>
$£49.40 - £43.60 =$	<input type="text" value="£5.80"/>	$£1.74 - £1.40 =$	<input type="text" value="34p"/>
$£32.60 - £2.40 =$	<input type="text" value="£30.20"/>	$£39.10 - £3.54 =$	<input type="text" value="£35.56"/>
$£4.83 - £1.02 =$	<input type="text" value="£3.81"/>	$£2.20 + £1.69 =$	<input type="text" value="£3.89"/>
$£4.11 + £28.90 =$	<input type="text" value="£33.01"/>	$£48.10 - £14.30 =$	<input type="text" value="£33.80"/>
$£38.90 - £29.30 =$	<input type="text" value="£9.60"/>	$£47.60 - 73p =$	<input type="text" value="£46.87"/>
$£1.18 - 28p =$	<input type="text" value="-90p"/>	$£10.90 - £4.10 =$	<input type="text" value="£6.80"/>
$£2.97 + £4.92 =$	<input type="text" value="£7.89"/>	$£38.40 - 7p =$	<input type="text" value="£38.33"/>
$£23.90 - £4.94 =$	<input type="text" value="£18.96"/>	$£2.86 + £43 =$	<input type="text" value="£45.86"/>



MATHS PUZZLE 82

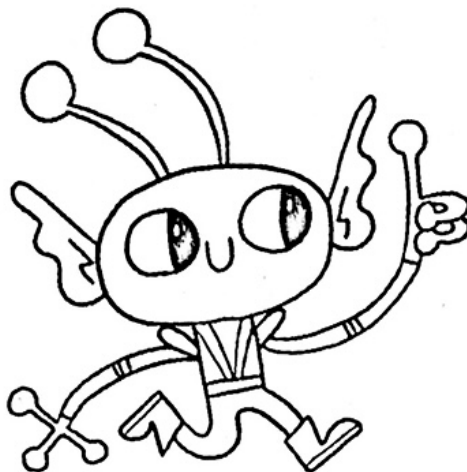
r_8 4	r_7 5	2	r_{12} 6	1	3
1	r_9 3	6	r_9 4	5	2
3	r_6 6	r_6 5	1	r_6 2	4
r_6 2	4	r_4 1	3	r_6 6	r_{12} 5
r_{17} 5	r_4 1	3	r_6 2	4	6
6	2	4	r_8 5	3	1

MATHS PUZZLE 83

a) 4 aliens

b) 8 aliens

c) 2 antennae – it is the second alien in the third row on the left-hand page, which has a total of 11 arms, lower limbs and eyes



MATHS PUZZLE 84

$48 = 12 + 17 + 19$
 $64 = 22 + 18 + 24$
 $70 = 21 + 25 + 24$

MATHS PUZZLE 85

		3
4	4	
6		
	5	5
		3
		5

MATHS PUZZLE 86

				9	3		
			7	4	3	1	10
		11	1	5	2	3	4
	7	22	4	2	1	4	1
13	1	8	4	7	8	2	4
15	6	9	11	4	8	1	2
	11	1	3	2	5		
		4	1	3			

ANSWERS

MATHS PUZZLE 87

- a) The probability of one head for one toss is $\frac{1}{2}$. So the likelihood of this happen twice out of two tosses, is $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
- b) The probability of three heads in succession, out of three tosses, is $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{8}$
- c) There are three ways of getting two heads and one tail out of three tosses: head, head, tail; or head, tail, head; or tail, head, head. So there are three possibilities out of $2 \times 2 \times 2 = 8$ possible options. Therefore the probability of two heads and one tail = $\frac{3}{8}$

MATHS PUZZLE 88

5	3	4	2	1
4	1	5	3	2
2	5	3	1	4
1	4	2	5	3
3	2	1	4	5



MATHS PUZZLE 89

48 = $3 + 6 + 9 + 13 + 17$ (remove 10, 12);
 $3 + 6 + 10 + 12 + 17$ (remove 9, 13);
 $6 + 12 + 13 + 17$ (remove 3, 9, 10);
 $9 + 10 + 12 + 17$ (remove 3, 6, 13)

42 = $3 + 9 + 13 + 17$ (remove 6, 10, 12);
 $3 + 10 + 12 + 17$ (remove 6, 9, 13);
 $6 + 9 + 10 + 17$ (remove 3, 12, 13);
 $12 + 13 + 17$ (remove 3, 6, 9, 10)

32 = $3 + 6 + 10 + 13$ (remove 9, 12, 17);
 $3 + 12 + 17$ (remove 6, 9, 10, 13);
 $6 + 9 + 17$ (remove 3, 10, 12, 13);
 $9 + 10 + 13$ (remove 3, 6, 12, 17)

MATHS PUZZLE 90

5	2	4	3	1	6
1	6	3	4	5	2
3	5	6	1	2	4
2	4	1	6	3	5
4	3	2	5	6	1
6	1	5	2	4	3

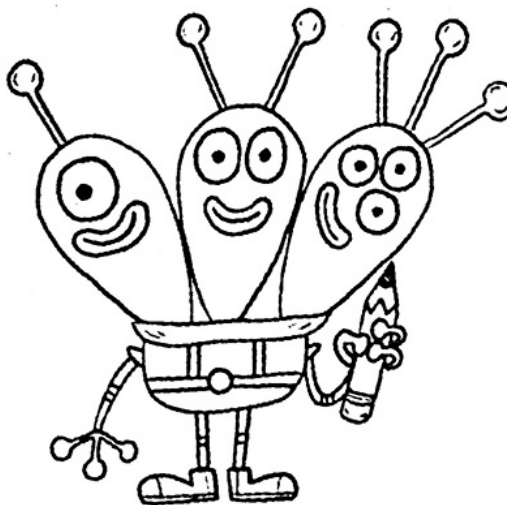
MATHS PUZZLE 91

1	<	2	3	4	5
			^		
2	<	3	<	4	<
					1
					^
5	>	4	1	3	2
			^		^
4	5	>	2	1	3
					^
3	1	5	2	4	

MATHS PUZZLE 92

a) 3 loaves of bread (£3.60) and 4 pints of milk (£2.20)

b) I planted 120 bulbs



MATHS PUZZLE 93

Option a is the correct answer

MATHS PUZZLE 94

a) Delete the 4 from the 46 to give $6 + 37 + 58 = 101$

b) This is easier than it looks. You only need to spot that $3 \times 5 = 15$, and so $30 \times 50 = 1500$. Then all you need to do is delete the 9 from the 90 to give $(30 \times 50) + (75 \times 0) = 1500$

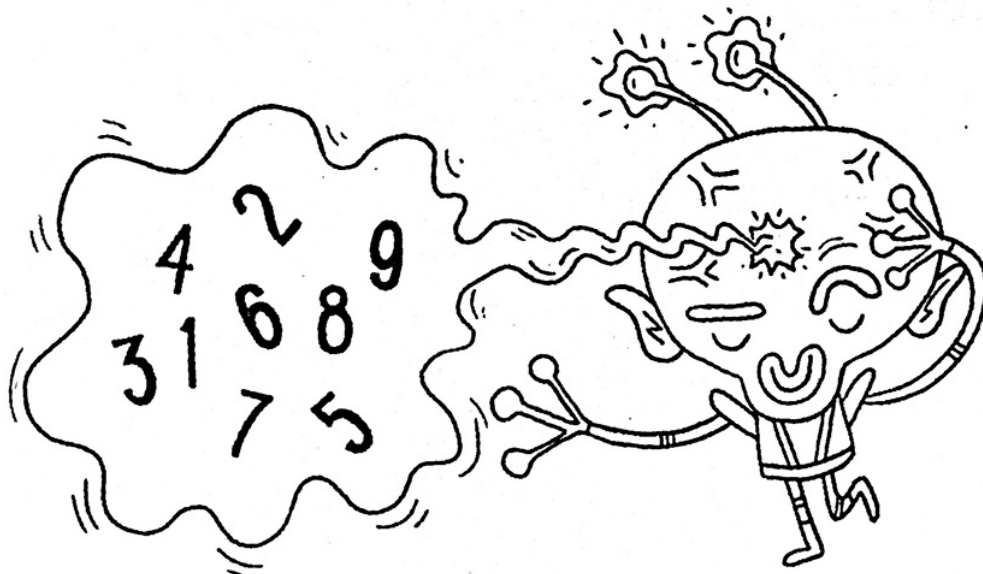
c) The result, 2844, ends in a 4, but the last digit of each of the three other numbers is 1, which means that the answer to the sum as printed must end in a 3. The only way to make the last digit anything other than a 1 is to delete the final digit of 1221 to give: $1411 + 122 + 1311 = 2844$

d) The right-hand side is an odd number, so we can't have an even number on the left-hand side, since any number multiplied by an even number is always an even number too. So we have to delete the 2 from the 12 to give $1 \times 13 \times 15 \times 17 \times 19 = 62985$

MATHS PUZZLE 95

a) $\times 2 + 1$

b) $\div 2 - 2$



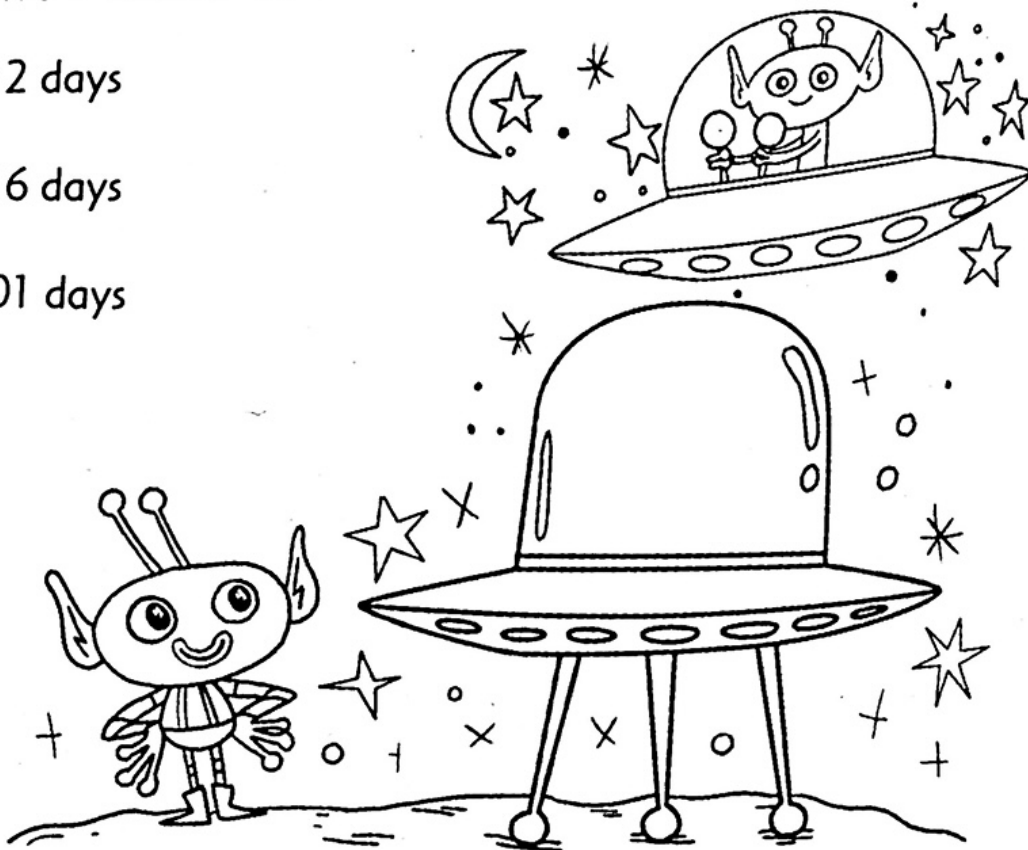
ANSWERS

MATHS PUZZLE 96

6	4	2	1	5	3
1	5	3	4	6	2
3	2	6	5	4	1
4	1	5	3	2	6
5	6	1	2	3	4
2	3	4	6	1	5

MATHS PUZZLE 97

- a) 112 days
- b) 116 days
- c) 301 days



MATHS PUZZLE 98

a) $7 \times 7 - 7 \div 7 =$
 7×7 gives you 49, from which you subtract 7 to get 42. Then you divide by 7 to result in 6.

b) $77 - 7 =$
 You need to press the 7 key multiple times between calculations. Subtracting 7 from 77 results in 70.

c) $777 - 77 \div 7 =$
 If you subtract 77 from 777 you get 700. Now if you divide by 7 you result in 100.

MATHS PUZZLE 99

a) 7 17 26 34 41 47 52
 Add 10, 9, 8, 7, etc at each step

b) 59 53 47 43 41 37 31
 Prime numbers in decreasing value

c) 0.15 0.3 0.6 1.2 2.4 4.8 9.6
 Multiply by 2 at each step

d) 35 24 13 2 -9 -20 -31
 Subtract 11 at each step

e) 3 5 8 13 21 34 55
 Add the previous two numbers together at each step

ANSWERS

MATHS PUZZLE 100

⁴ 4	^{8*} 2	^{9*} 3	1
1	4	^{16*} 2	3
^{18*} 3	1	4	2
2	3	1	⁴ 4

MATHS PUZZLE 101

		19	24	17				
	24	7	8	9	25		23	14
	28	4	7	8	9	17	9	8
	17	8	9	30	7	9	8	6
		17	30	9	8	7	6	
	15	9	2	3	1			
29	17	9	7	8	5	23	24	
9	8	1	30	7	9	6	8	
				24	7	8	9	