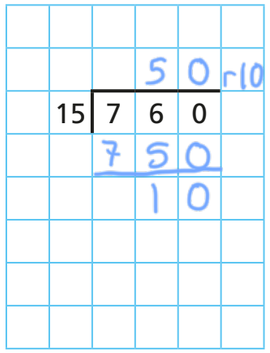
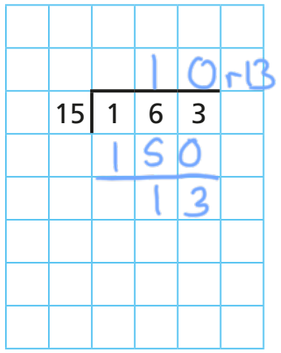
Long division (3)

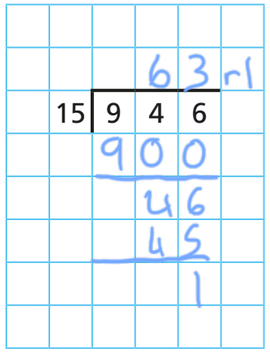
1 Complete the number track with the multiples of 15

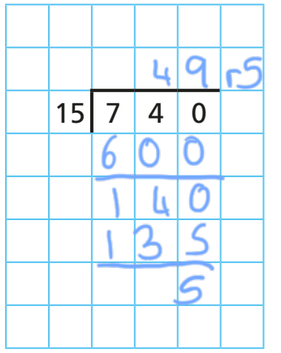
15	30	45	60	75	90	105	120	135	150

Use the multiples of 15 to complete the divisions.









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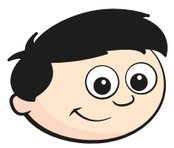


I am trying to complete this using long division, but it doesn't seem to help.

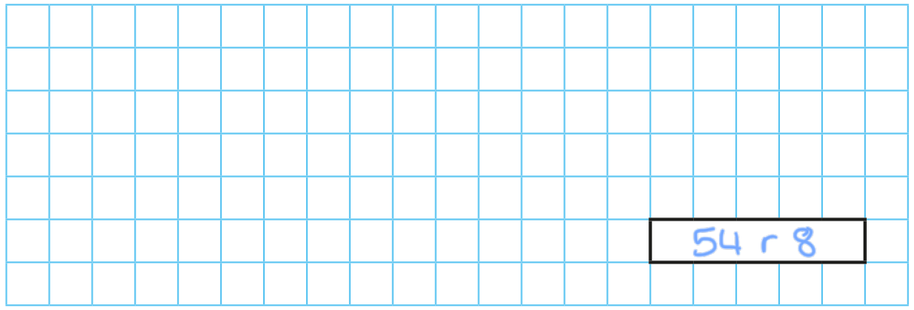
	0	0	
15	1	$^{1}3$	$^{13}6$

Look at Dexter's working.

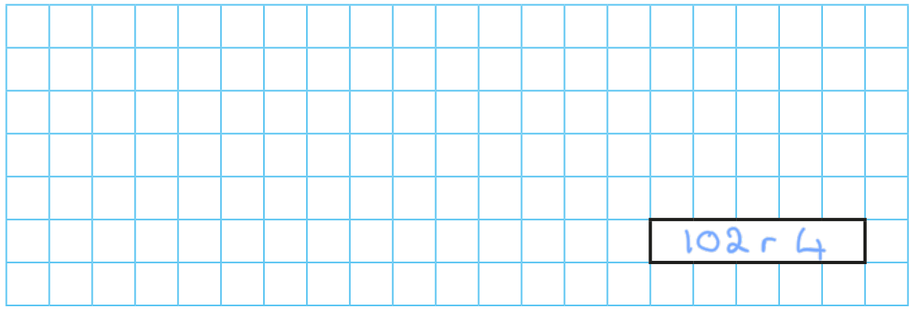
What problem is he facing? Talk about it with a partner.

3 Work out the divisions.

a) 764 ÷ 14



b) 1,840 ÷ 18



4 A school has 380 pupils, 24 staff and 9 governors.

Everyone is invited to a special meal.

Each table seats 12 people.

a) How many tables are needed?

413 ÷ 12 = 34 r 5

35

b) How did you work this out? Did you use the same method as your partner?

5 Tick the calculation cards that leave a remainder greater than 10

899 ÷ 30 ✓	899 ÷ 8 ✗	899 ÷ 11 ✗	899 ÷ 24 ✓	899 ÷ 99 ✗

899 ÷ 30 = 29r29

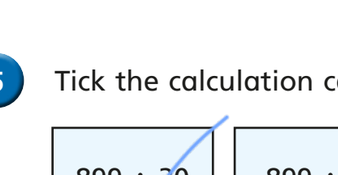
899 ÷ 11 = 81r8

899 ÷ 24 = 37r11

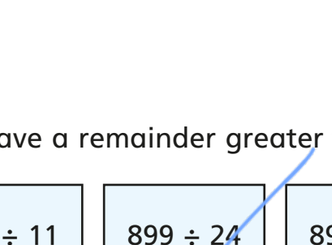
899 ÷ 99 = 9r8

6 Tommy needs to buy 650 balloons for a festival.

Party Supplies



Fun Stores



How much would it cost to buy the balloons from each shop?

650 ÷ 15 = 43r5

44 × £1.20 = £52.80

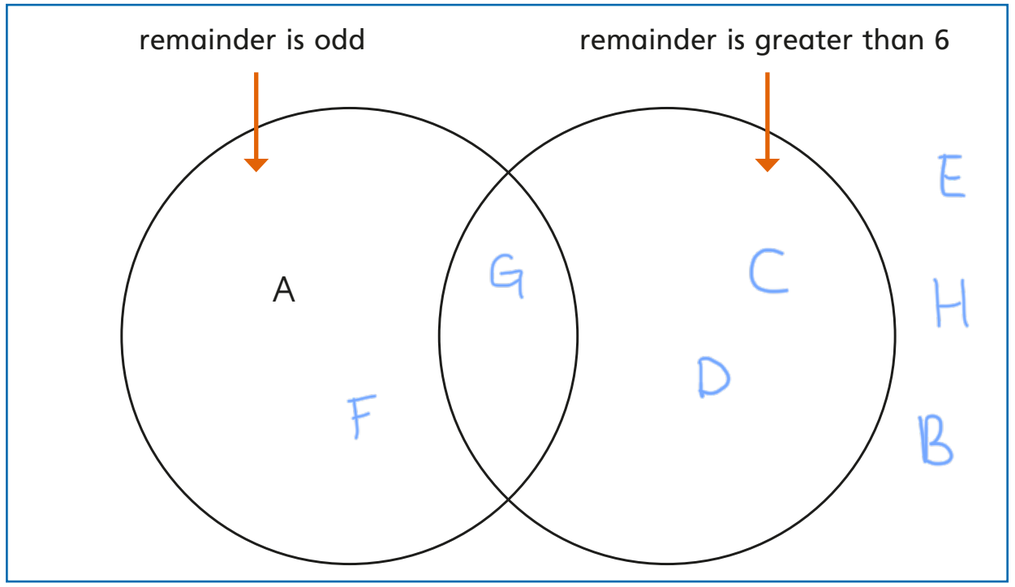
650 ÷ 24 = 27r2

28 × £2 = £56

Party Supplies: £52.80

Fun Stores: £56

7 Label the sorting diagram with the divisions. The first one has been done for you.



A 901 ÷ 16

B 902 ÷ 16

C 910 ÷ 16

D 920 ÷ 16

E 901 ÷ 17

F 902 ÷ 17

G 910 ÷ 17

H 920 ÷ 17

8

1	2	3	4	5

Use each digit card once to complete the division in different ways.

□□□ ÷ □□

Experiment to find divisions that give:

a) the smallest possible remainder

b) the largest remainder

c) a remainder that is a multiple of 5

Talk about your answers with a partner.