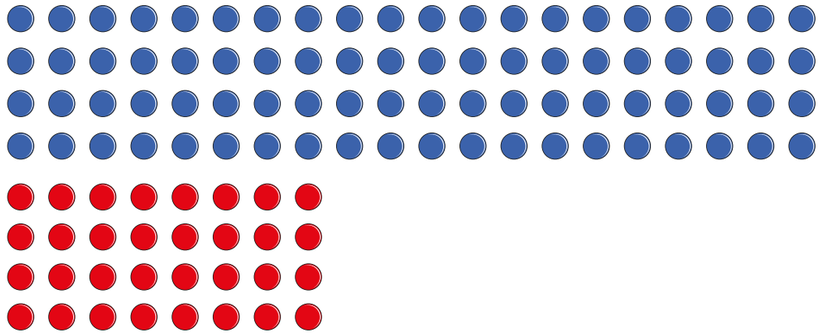
Efficient multiplication

1 Class 4 are multiplying 28 × 4 mentally.

They are trying two different methods.

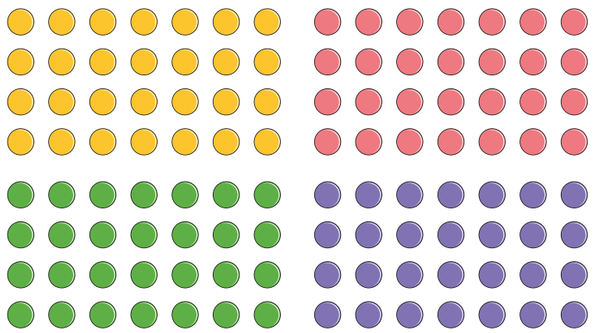
a) Complete their calculations.

Method 1



20 × 4 + 8 × 4 = ☐ + ☐ = ☐

Method 2



4 × ☐ = ☐

b) Which method do you find easier?

Talk about it with a partner.

c) What other methods could you use to work out 28 × 4?

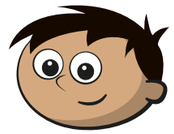
_____

_____

2 Mo, Amir and Annie worked out 35 × 6 in 3 different ways.

Mo

I multiplied 30 by 6 and then added 5 more lots of 6



Amir

I multiplied 35 by 2, then multiplied that answer by 3

Annie

I multiplied 5 by 6, then multiplied that answer by 7

a) Work out the answer using each method to show that they are all correct.

Mo

Amir

Annie

b) Who has used the most efficient method?

Talk about it with a partner.

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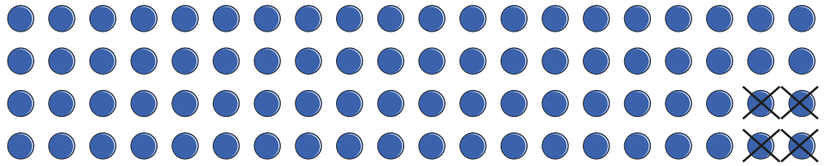
3 Scott is working out 21 × 4



20 × 4 = 80
80 – 4 = 76
21 × 4 = 76

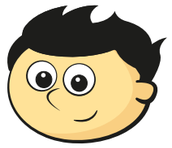
a) What mistake has Scott made?

_____

b) What is the correct answer? ☐

4 Jack works out 36 × 9

36 × 9
36 × (10 – 1)
360 – 36 = 324



Adapt Jack's method to work out 36 × 99

36 × 99 = ☐

5 Esther has found a quick way to multiply 84 by 5

84 × 5
84 × 10 = 840
(then divide by 2) which is 420

Use Esther's method to complete the calculations.

43 × 5 = ☐ 74 × 5 = ☐

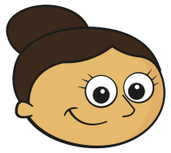
62 × 5 = ☐

6 Tommy and Dora are both working out 25 × 8

25 × 8 = 25 × 10 – 25 × 2

a) Use Tommy's method to work out the answer.

☐



25 × 8 = 50 × 8 ÷ 2

b) Use Dora's method to work out the answer.

☐

c) Whose method do you prefer? Why?

_____

d) Do you know another method?

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