1 Class 4 are multiplying 28 × 4 mentally.

They are trying two different methods.

a) Complete their calculations.

Method 1
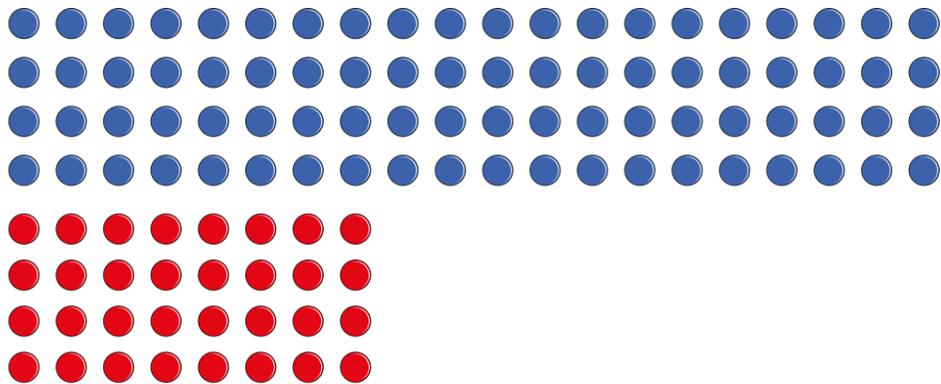
$20 \times 4 + 8 \times 4 = \boxed{80} + \boxed{32} = \boxed{112}$

Method 2
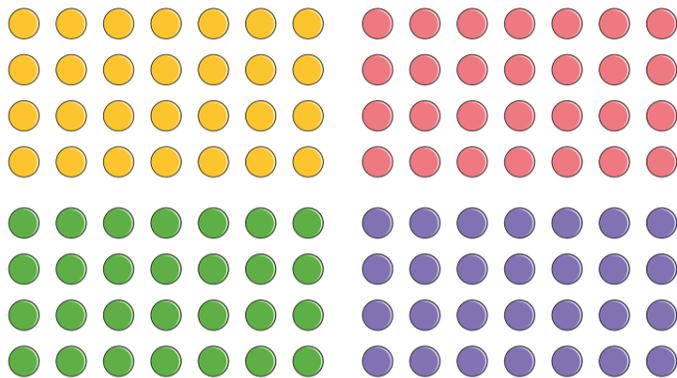
$4 \times \boxed{28} = \boxed{112}$

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?

E.g. $(4 \times 30) - (4 \times 2)$

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

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

Mo

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

Amir

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

Annie

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

Mo

$30 \times 6 = 180$
$5 \times 6 = 30$
$180 + 30 = \underline{210}$

Amir

$35 \times 2 = 70$
$70 \times 3 = \underline{210}$

Annie

$5 \times 6 = 30$
$30 \times 7 = \underline{210}$

b) Who has used the most efficient method?

Talk about it with a partner.

3 Scott is working out 21 × 4
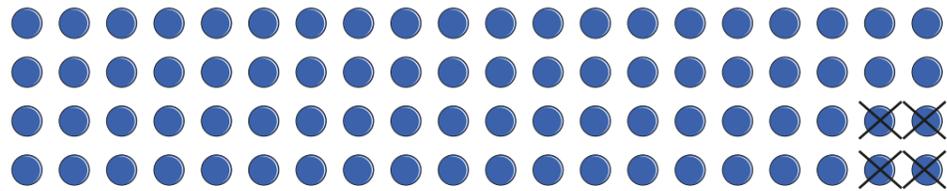
20 × 4 = 80
80 − 4 = 76
21 × 4 = 76

a) What mistake has Scott made?

He has taken 4 he should have added it.

b) What is the correct answer?

84

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 = 3,564

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 = 215   74 × 5 = 370

62 × 5 = 310

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.

200
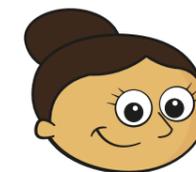
25 × 8 = 50 × 8 ÷ 2

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

200

c) Whose method do you prefer? Why?

Various answers.

d) Do you know another method?