

Independent Practice 1:

Alex is making arrays using counters.

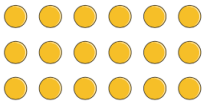
a) What calculation is represented in each array?



$$1 \times 18 = 18$$



$$2 \times 9 = 18$$



$$3 \times 6 = 18$$

b) Use your answers from part a) to help you write all the factors of 18

1, 2, 3, 6, 9, 18

Independent Practice 2:

6 – 1, 6, 2, 3

8 – 1, 8, 2, 4

14 – 1, 14, 2, 7

21 – 1, 21, 3, 7

12 – 1, 12, 2, 6, 3, 4

10 – 1, 10, 2, 5

15 – 1, 15, 3, 5

72 – 1, 72, 2, 36, 6, 12, 3, 24, 4, 18, 8, 9

20 – 1, 20, 2, 10, 5, 4

45 – 1, 45, 5, 9, 3, 15

18 – 1, 18, 2, 9, 3, 6

22 – 1, 22, 2, 11

Challenge:

Tommy says



The greater the number, the more factors it will have.

Tommy is incorrect. Children explain by showing an example of two numbers where the greater number has less factors. For example, 15 has 4 factors 1, 3, 5 and 15. 17 has 2 factors 1 and 17.

Is Tommy correct?

Use arrays to explain your answer.