

Bronze

1a. Circle the common factors of 5 and 10 by systematically checking each times table.

1 2 3 5 10



VF

2a. Complete the number sentences with the missing common factor.

$$\square \times 6 = 12$$



$$20 \div \square = 10$$



VF

3a. Match the pairs of numbers to their common factor. You may want to draw arrays to help you.

15 and 25 3

6 and 9 2

14 and 20 5



VF

4a. Write all the common factors for the numbers below.

10

20



VF

1b. Circle the pair of numbers that share the most number of common factors by systematically checking each times table.

15 and 20

5 and 12

8 and 10

12 and 14

10 and 20



PS

2b. Dean says,



The number 5 is the largest common factor of 12 and 15.

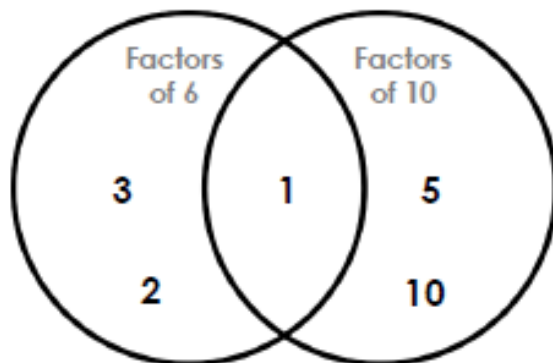


Is Dean correct? Prove it.



R

3b. Maisie has sorted some factors into a Venn diagram by systematically checking each times table.



Explain the mistake that she has made.

5a. Circle the common factors of 8 and 40 by systematically checking each times table.

1 2 3 4 5 6 7 8 10



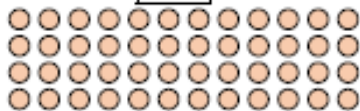
VF

6a. Complete the number sentences with the missing common factor.

$$\square \times 5 = 30$$



$$48 \div \square = 8$$



VF

7a. Match the pairs of numbers to their common factor. You may want to draw arrays to help you.

36 and 42 11

55 and 99 4

24 and 48 6



VF

8a. Write all the common factors for the numbers below.

16

28



VF

4b. Circle the pair of numbers that share the most number of common factors by systematically checking each times table.

16 and 24

18 and 27

9 and 21

28 and 49

25 and 55



PS

5b. Benji says,



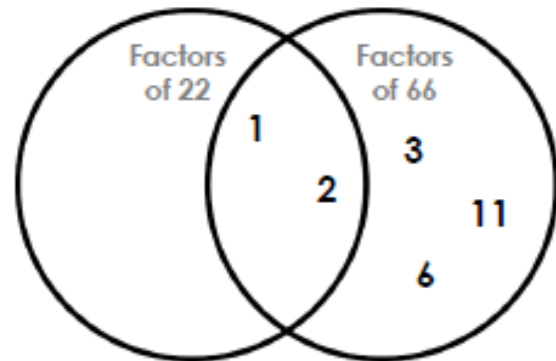
The number 3 is the largest common factor of 54 and 63.

Is Benji correct? Prove it by working systematically through the times tables.



R

6b. Daisy has sorted some factors into a Venn diagram by systematically checking each times table.



Explain the mistake that she has made.

Gold

9a. Circle the common factors of 40 and 60.

2	11	1
12	5	10
3	20	4



VF

10a. Complete the number sentences with the missing common factor.

$$\square \times 12 = 132$$

$$121 \div \square = 11$$



VF

11a. Match the pairs of numbers to their common factor.

84 and 108 9

26 and 52 12

72 and 144 13



VF

12a. Write all the common factors for the numbers below.

48

60



VF

7b. Circle the pairs of numbers that share the most number of common factors.

11 and 88

18 and 45

44 and 55

12 and 96

60 and 80



PS

8b. Scott says,



The number 14 is the largest common factor of 84 and 140.

Is Scott correct? Prove it.



R

9b. Priya has sorted some factors into a Venn diagram.



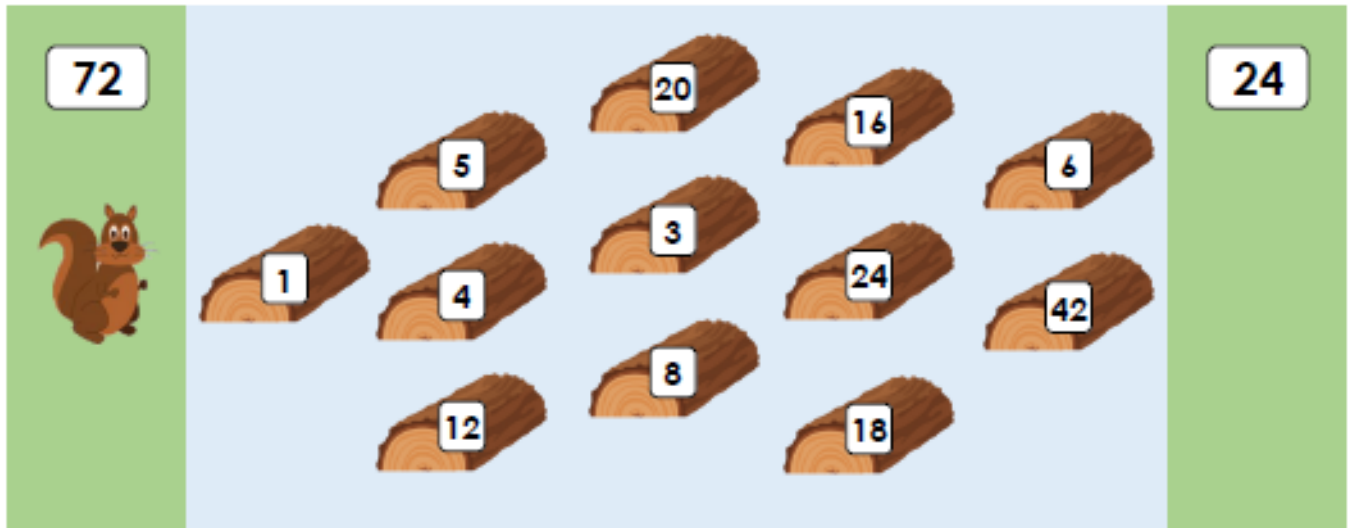
Explain the mistakes that she has made.

Challenge

1. Squeak the Squirrel wants to cross the river.

He can only step on the logs which are common factors of the numbers on both banks.

Explore the route Squeak could take. Is there more than one possible route?

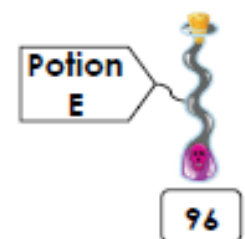
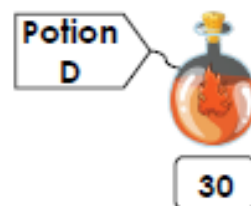
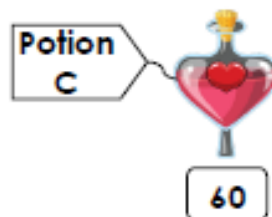
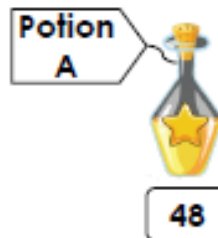


2. Wilf the Wizard is trying to combine two potions in order to create a spell.

He says,



The two potions that are needed for the spell have an even number of common factors.



When matching the two potions, the common factors they share cannot be lower than 5 factors otherwise they will explode!

Explore the different combinations of potions Wilf could use to create his spell.