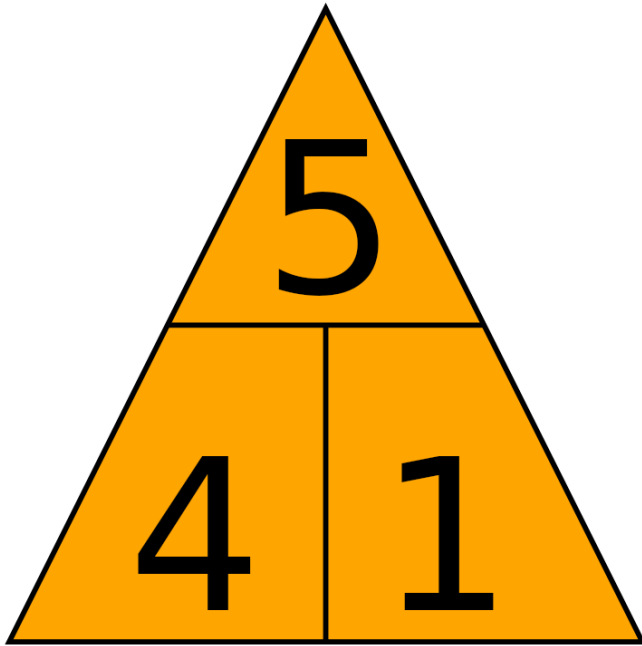


Mathematical Reasoning

1 Which addition fact comes from this fact family



A

$$4 + 1 = 5$$

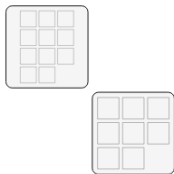
B

$$5 + 1 = 4$$

C

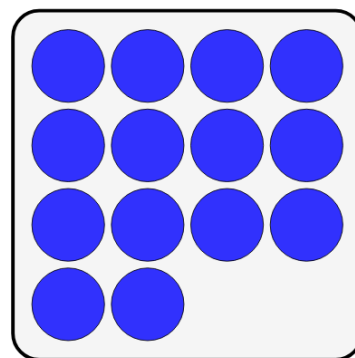
$$4 + 5 = 1$$

2 How many squares are there?



A	14	B	23	C	15
D	21	E	17	F	19

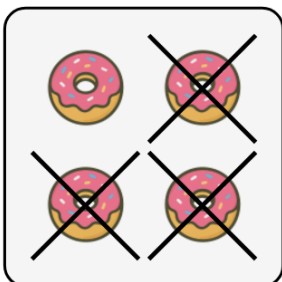
3 How many circles will be left if you remove 2?



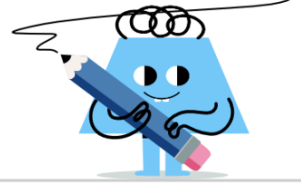
Remove 2 circles

A	15	B	9	C	16
D	8	E	10	F	12

4 How many donuts are left?

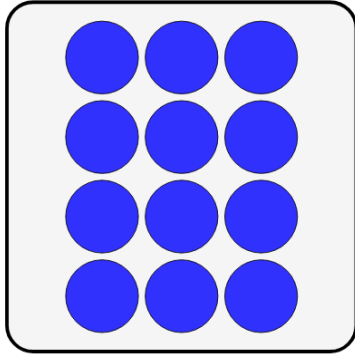


A	four
B	five
C	one
D	three



Mathematical Reasoning

- 5 How many circles will be left if you remove 1?



Remove 1 circle

A fourteen	B seven	C eight
D nine	E fifteen	F eleven

- 6 Solve for the missing value

$$2 - ? = 1$$

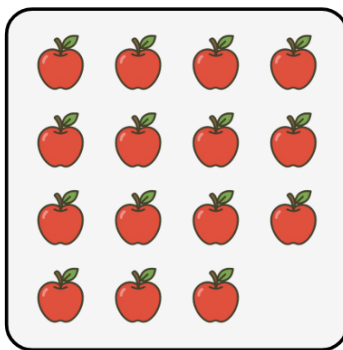
A 8	B 2	C 9
D 7	E 5	F 1

- 7 Solve for the missing value

$$? - 7 = 2$$

A 4	B 7	C 9
D 6	E 14	F 18

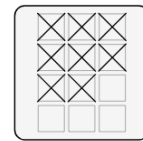
- 8 Choose the subtraction sentence for when you remove 11 apples.



Remove 11 apple

A $15 - 12$	B $15 - 11$	C $19 - 11$
D $13 - 11$	E $16 - 11$	F $15 - 15$

- 9 Choose the subtraction sentence for the squares?

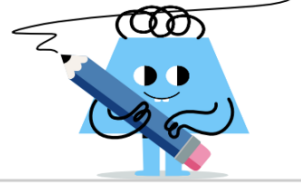


A $7 - 8$	B $12 - 9$	C $12 - 11$
D $12 - 8$	E $14 - 8$	F $12 - 10$

- 10 Find the equation that best represents this sentence

seven minus y is equal to n

A $y + n = 7$	B $y \times n = 7$
C $n - 7 = y$	D $y - 7 = n$
E $7 + n = y$	F $7 - y = n$



Mathematical Reasoning

11 Find the number that balances the equation

$$3 + 1 = ? + 3$$

A 2	B 4	C 0
D 30	E 3	F 1

12 Find the number that balances the equation

$$9 + 6 + 2 = 7 + 8 + ?$$

A 40	B 2	C 1
D 3	E 4	F 0

13 Solve for the missing value

$$5 + 5 + 1 + ? = 12$$

A 1	B 4	C 7
D 8	E 5	F 10

14 Solve for the missing value

$$7 + ? + 1 = 11$$

A 2	B 5	C 6
D 3	E 9	F 7

15 Solve for the missing value

$$7 - ? = 5$$

A 5	B 2	C 9
D 8	E 1	F 3

16 Solve for the missing value

$$? - 75 = 1$$

A 72	B 94	C 76
D 64	E 84	F 90

17 Find the number that balances the equation

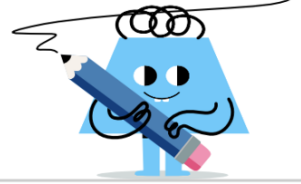
$$5 - 1 = ? - 5$$

A 7	B 1	C 4
D 9	E 8	F 11

18 Solve for the missing value

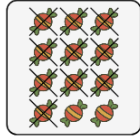
$$3 + ? = 8$$

A 3	B 12	C 4
D 7	E 5	F 14



Mathematical Reasoning

19 Choose the subtraction sentence for the candies?



A	12 - 10	B	12 - 9	C	12 - 13
D	14 - 10	E	15 - 10	F	12 - 14

20 Is the first number less than, equal to, or greater than the second number?
10 27

10 ○ 27

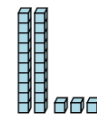
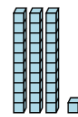
A	>
B	<
C	=

21 Is the first number less than, equal to, or greater than the second number?
74 73

74 ○ 73

A	=
B	<
C	>

22 Is the first set less than, greater than, or equal to the second set?



A	>
B	<
C	=

23 What is the next number in the pattern, skip counting upwards by 4

8, 12, 16, __

A	21	B	20
C	19		

24 Find the term that would be next in this increasing pattern

3, 6, 9, 12, ?

A	18	B	15	C	14
D	17	E	19	F	21

25 Find the term that would be next in this increasing pattern
2, 4, 6, ?



1



2



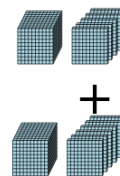
3

?

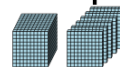
4

A	14	B	11	C	2
D	6	E	8	F	3

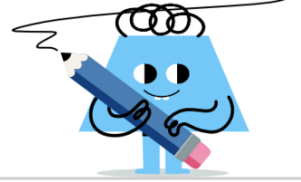
26 Choose the addition sentence for the blocks



+

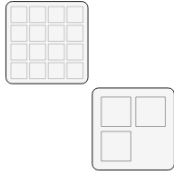


A	1495 + 1600	B	1499 + 1600	C	1502 + 1600
D	1500 + 1596	E	1500 + 1600	F	1500 + 1599



Mathematical Reasoning

27 Choose the addition sentence for the squares?



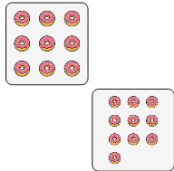
- | | | |
|------------|------------|------------|
| A $16 + 3$ | B $16 + 4$ | C $16 + 6$ |
| D $19 + 3$ | E $13 + 3$ | F $12 + 3$ |

28 Choose the subtraction sentence if the second group is subtracted from the first?



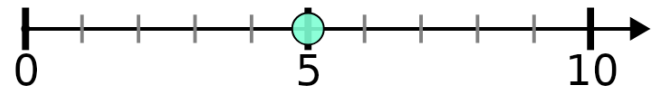
- | | | |
|--------------|-------------|---------------|
| A $24 - 51$ | B $24 - 13$ | C $24 - 32$ |
| D $521 - 13$ | E $24 - 26$ | F $24 - 2011$ |

29 Choose the addition sentence for the donuts?



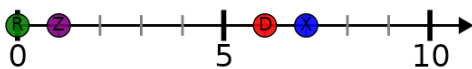
- | | | |
|-------------|-------------|-------------|
| A $5 + 10$ | B $13 + 10$ | C $11 + 10$ |
| D $10 + 10$ | E $9 + 11$ | F $9 + 10$ |

30 What number does this dot at?



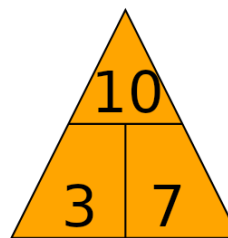
- | | | |
|-----|-----|-----|
| A 7 | B 3 | C 5 |
| D 1 | E 9 | |

31 What dot is at 6?



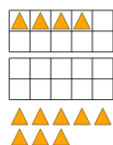
- | |
|-----|
| A R |
| B X |
| C Z |
| D D |

32 Which addition fact comes from this fact family



- | |
|----------------|
| A $13 + 8 = 5$ |
| B $3 + 7 = 10$ |
| C $3 + 10 = 7$ |
| D $10 + 7 = 3$ |

33 Find the total number of orange triangles when you add the 8 at the bottom



- | | | |
|------|------|------|
| A 13 | B 10 | C 5 |
| D 4 | E 15 | F 12 |

34 Each letter is a digit (0-9). Is the digit '8' possible in the box with a question mark?

$$\begin{array}{r} \text{A}6 \\ \times \text{C?} \\ \hline \text{EFG0} \end{array}$$

- | |
|-------|
| A No |
| B Yes |