Week 10
Lesson 1
Negative Numbers

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Introduction

Order this numbers from smallest to largest.

5	-1	0	-3	1	3	-5	4	-2	-4	2

smallest largest

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Introduction

Order this numbers from smallest to largest.

-5	-4	-3	-2	-1	0	1	2	3	4	5

smallest largest

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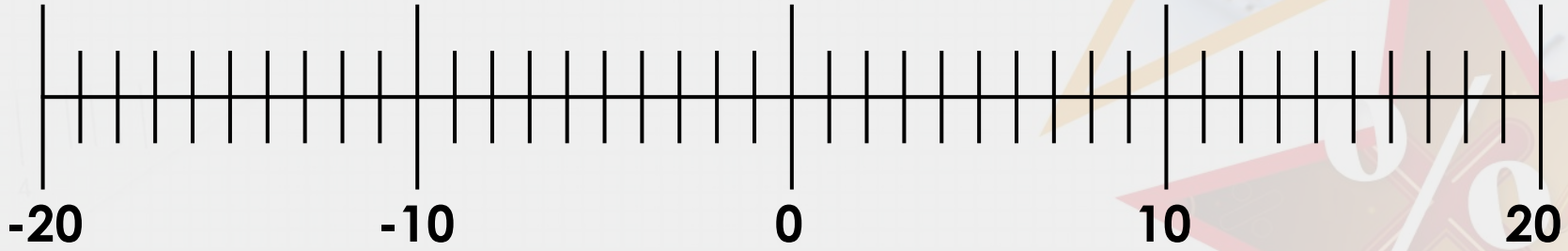
Varied Fluency 1

Write the numbers below on the number line.

15	-8	-13	8	-3



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Varied Fluency 1

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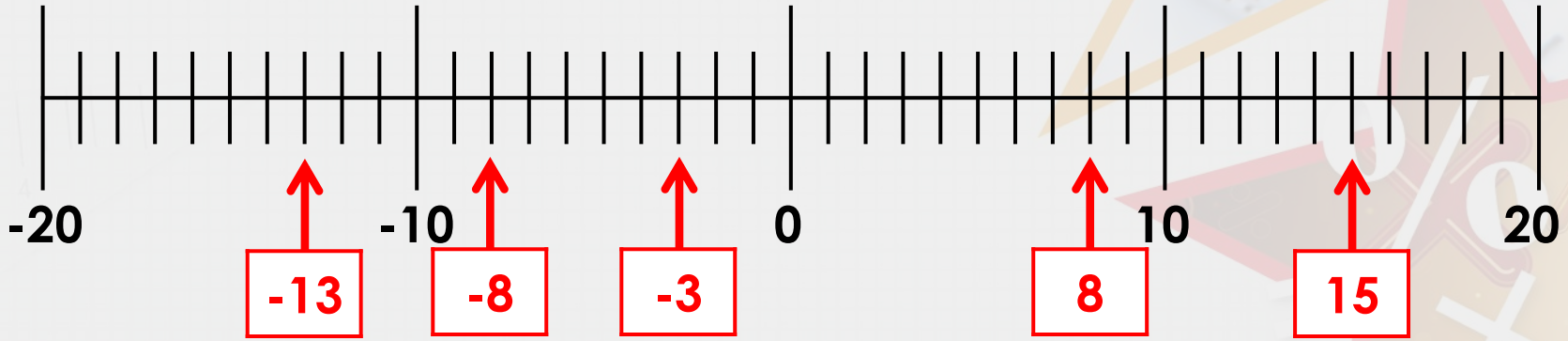
15	-8	-13	8	-3



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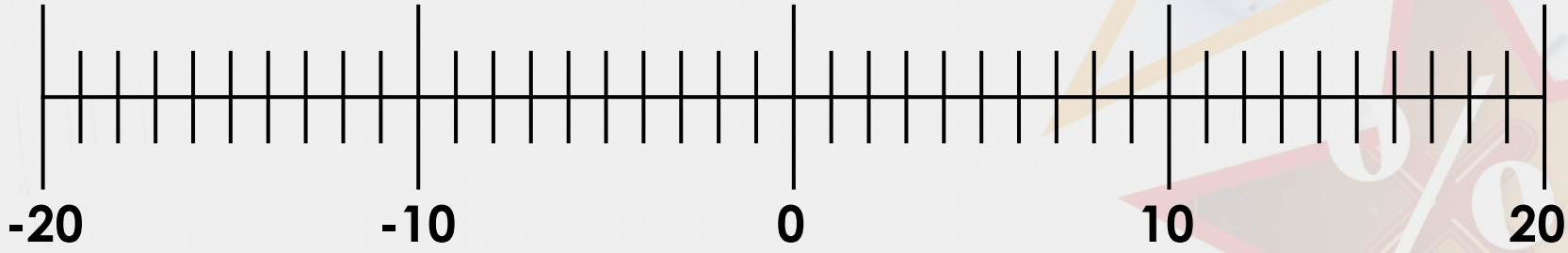
Varied Fluency 2

If the temperature in Hull is 15°C and the temperature in Moscow is -18°C, what is the difference between the two temperatures? Use the number line to help.



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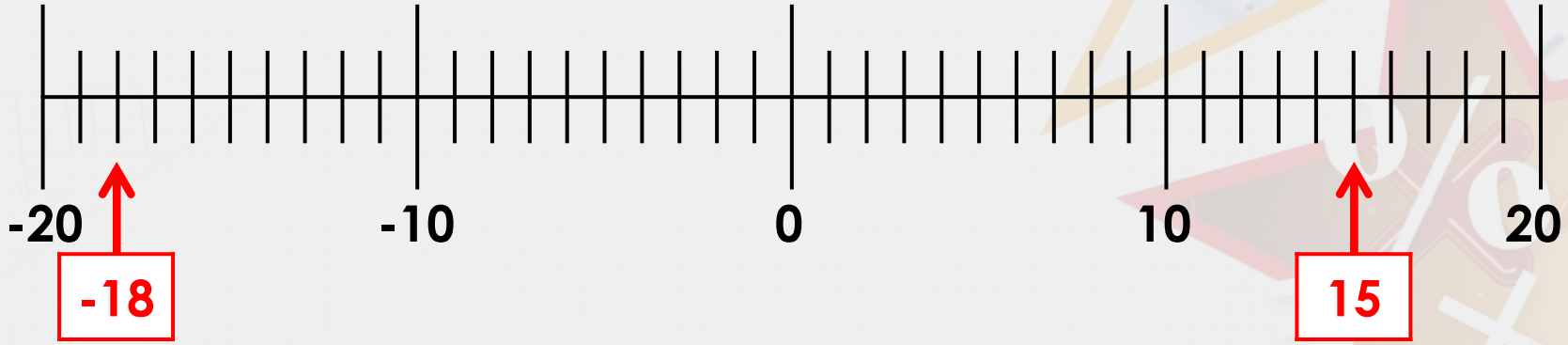
Varied Fluency 2

If the temperature in Hull is 15°C and the temperature in Moscow is -18°C, what is the difference between the two temperatures? Use the number line to help.



33 °C

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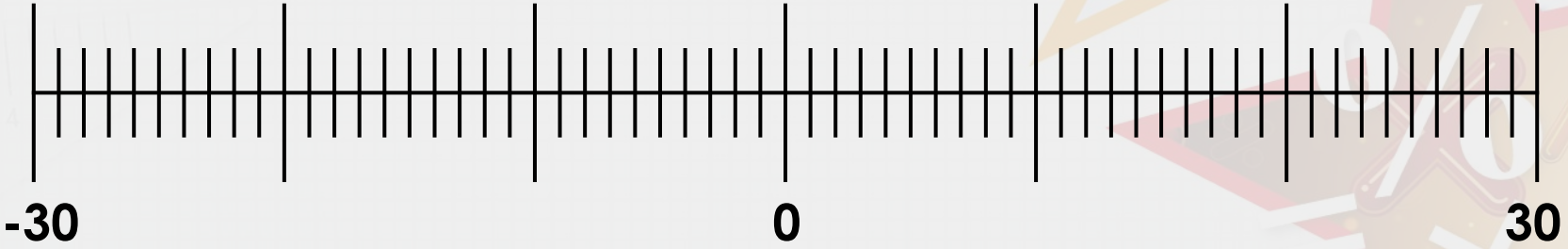
Varied Fluency 3

Identify the coldest temperature in each set of data and mark it on the number line below.

A. | - 14 | 0 | -12 | 19 | -9 | 29 |

B. | 5 | -19 | -2 | -21 | 15 | -3 |



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Varied Fluency 3

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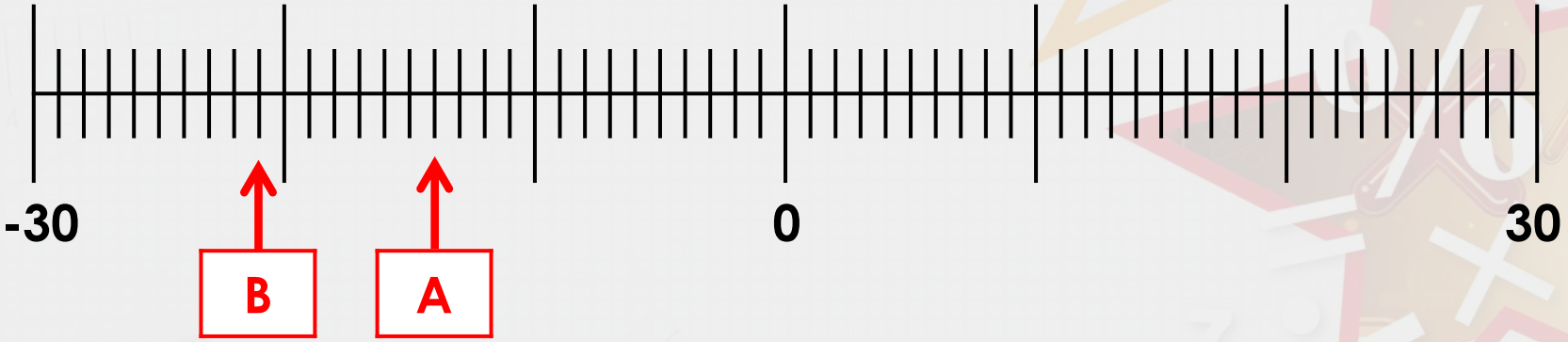
B. | 5 | -19 | -2 | -21 | 15 | -3 |



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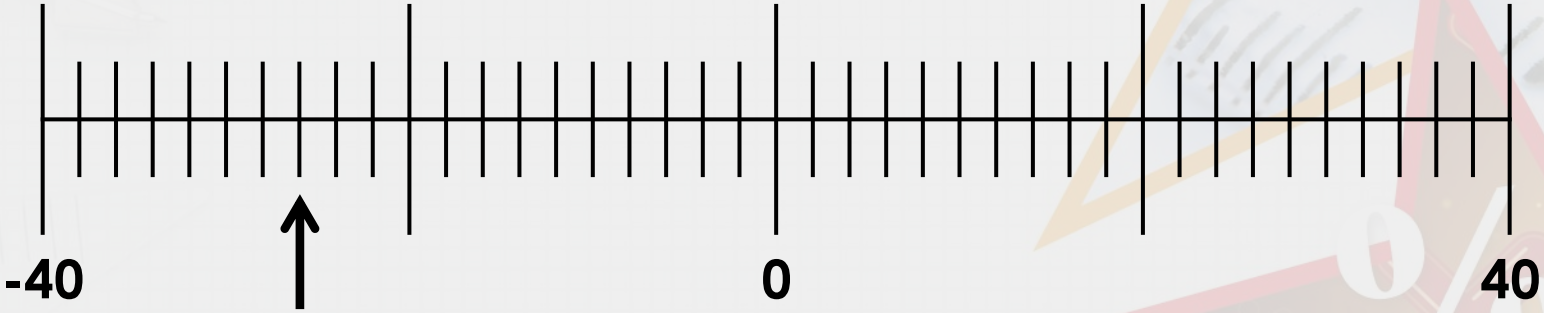
Varied Fluency 4

True or false? The arrow is pointing to -12 on the number line below.



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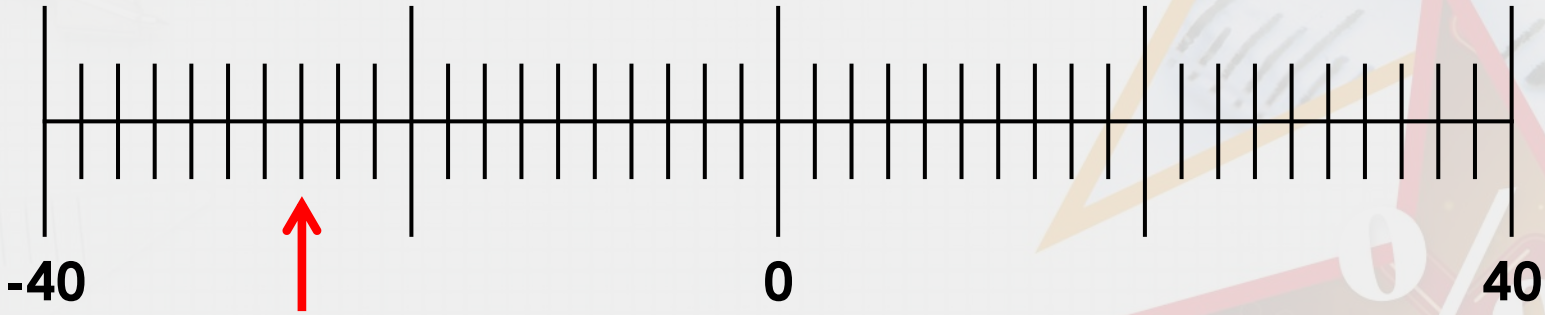
Varied Fluency 4

True or false? The arrow is pointing to -12 on the number line below.



False. The arrow is pointing to -26.

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Lesson 2
Addition and Subtraction

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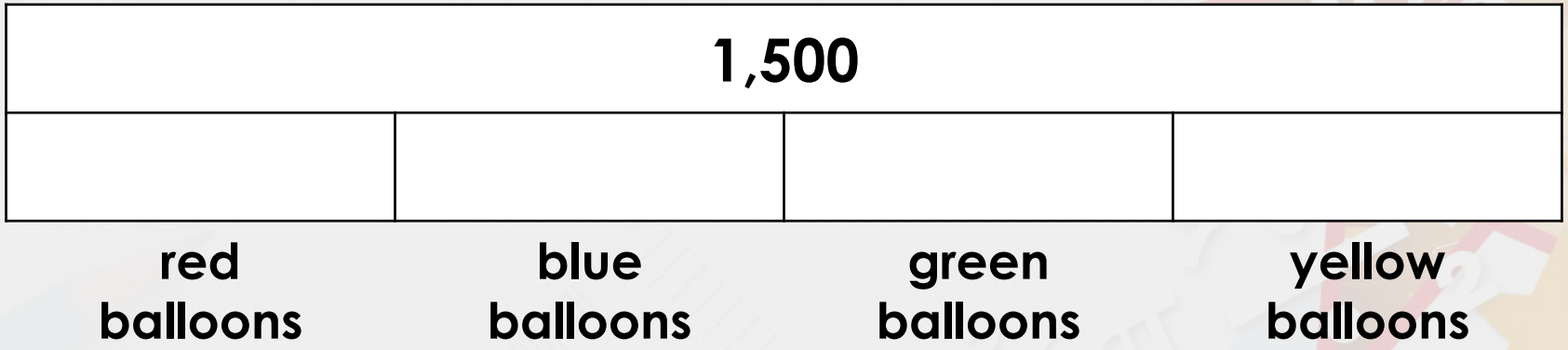
Introduction

Put the information from the following problem into a bar model. Solve the problem.

Byron orders 1,500 balloons for the summer fayre. He orders 540 red balloons. He orders 120 fewer blue balloons than red balloons. He orders 80 more green balloons than blue balloons. The rest of the balloons are yellow.

How many of each balloon does Byron order?



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Introduction

Put the information from the following problem into a bar model. Solve the problem.

Byron orders 1,500 balloons for the summer fayre. He orders 540 red balloons. He orders 120 fewer blue balloons than red balloons. He orders 80 more green balloons than blue balloons. The rest of the balloons are yellow.

How many of each balloon does Byron order?

1,500			
540	420	500	40
red balloons	blue balloons 540 – 120	green balloons 420 + 80	yellow balloons 1,500 – 1,460

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Varied Fluency 3

Solve the addition calculation below.

i)

	4	2	4	2	8
+		8	3	0	7

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Varied Fluency 3

Solve the addition calculation below.

i)

	4	2	4	2	8
+		8	3	0	7
	5	0	7	3	5
	1			1	

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Varied Fluency 3

Solve the addition calculation below.

i)

	6	3	0	7	4
+	1	8	6	6	2

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Varied Fluency 3

Solve the addition calculation below.

i)

	6	3	0	7	4
+	1	8	6	6	2
	8	1	7	3	6
	1		1		

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Varied Fluency 2

True or false?

	2	3	3	1	6
		4	0	8	4
+	5	1	2	2	5
	7	8	6	2	5
			1	1	

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Varied Fluency 2

True

	2	3	3	1	6
		4	0	8	4
+	5	1	2	2	5
	7	8	6	2	5
			1	1	

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Varied Fluency 1

Calculate the missing answer.

	6	4	7	0	7
–	1	0	4	1	2

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Varied Fluency 1

Calculate the missing answer.

	6	4	6 7	1 0	7
–	1	0	4	1	2
	5	4	2	9	5

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Varied Fluency 2

True or false?

	3	8 (8) / 1	0	8	0
–	2	7	9	7	0
	1	1	2	1	0

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Varied Fluency 2

True or false?

	3	7 8	1 0	8	0
–	2	7	9	7	0
	1	0	1	1	0

False

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Lesson 3
Multiples

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Introduction

Place the multiples in to the correct table.

Multiple of 4	Multiple of 6	Multiple of 7

30 20 18 44

49 40 35

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Introduction

Place the multiples in to the correct table.

Multiple of 4	Multiple of 6	Multiple of 7
20	30	49
44	18	35
40		

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Varied Fluency 1

Match the number to its multiple.

Number	Multiple
6	32
4	35
7	54

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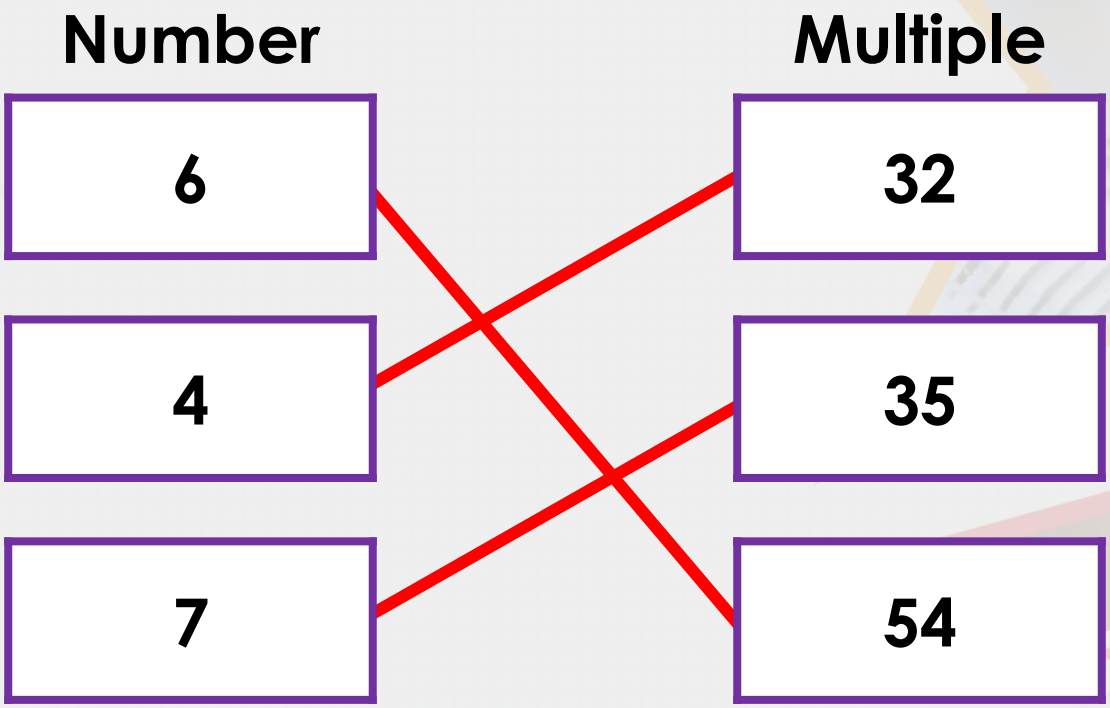
Varied Fluency 1

Match the number to its multiple.



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Varied Fluency 2

True or false?

54 is a multiple of 7.

False

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Varied Fluency 3

Complete the sequence of multiples.

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Varied Fluency 3

Complete the sequence of multiples.

24 | 30 | 36 | 42 | 48 | 54 | 60

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Varied Fluency 4

Fill in the table below with two possible multiples for each number.

Number	Multiple	
4		
8		
7		
6		

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Varied Fluency 4

Fill in the table below with two possible multiples for each number.

Various answers, for example:

Number	Multiple	
4	8	24
8	24	64
7	14	56
6	6	36

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Lesson 4
Factors and Common Factors

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Varied Fluency 1

Draw lines to match the factor pairs of 30 (which pairs of numbers are multiplied together to make 30)
Which pair is the odd one out?

4	10
5	9
3	6

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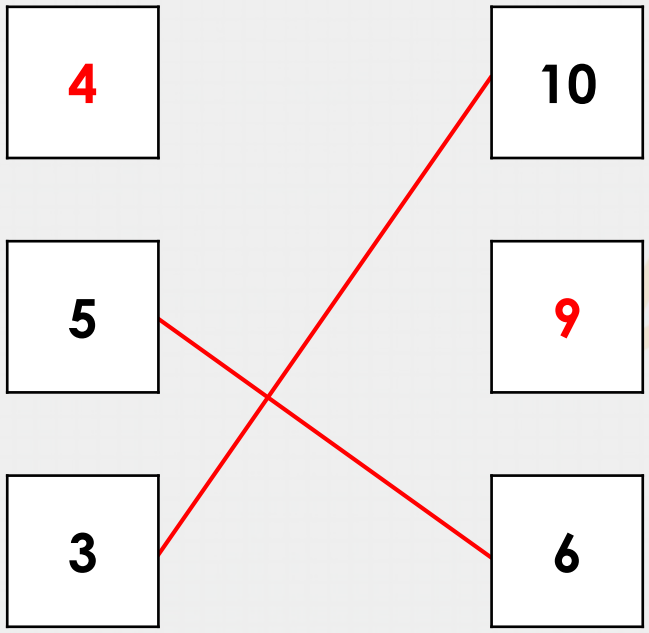
Varied Fluency 1

Draw lines to match the factor pairs of 30.
Which pair is the odd one out?



4 and 9 are not factor pairs of 30.

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Varied Fluency 2

True or false? All of these numbers are factors of 18.

3	1	9
2	6	18

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Varied Fluency 2

True or false? All of these numbers are factors of 18.

3	1	9
2	6	18

True

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Varied Fluency 3

Circle the numbers that are NOT factors of 20.

2

5

4

7

3

9

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Varied Fluency 3

Circle the numbers that are NOT factors of 20.

2

5

4

7

3

9

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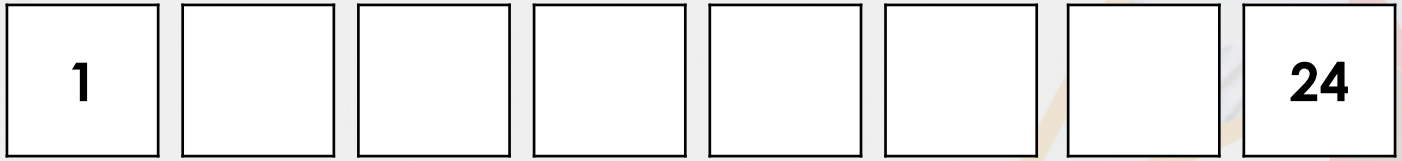
Varied Fluency 4

Find the missing factors of 24.



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Varied Fluency 4

Find the missing factors of 24.

1	2	3	4	6	8	12	24

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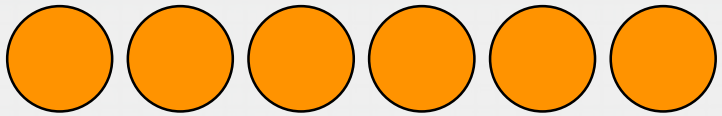
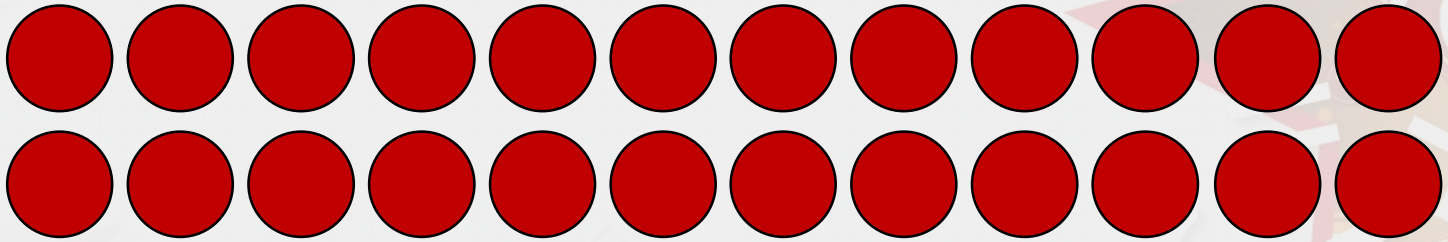
Varied Fluency 1

Circle the common factors (numbers that are factors of both numbers) of 6 and 24 by systematically checking each times table.

1	2	3	4	5	6	7	9	10





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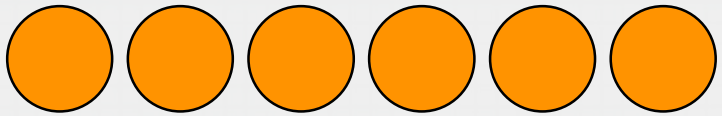
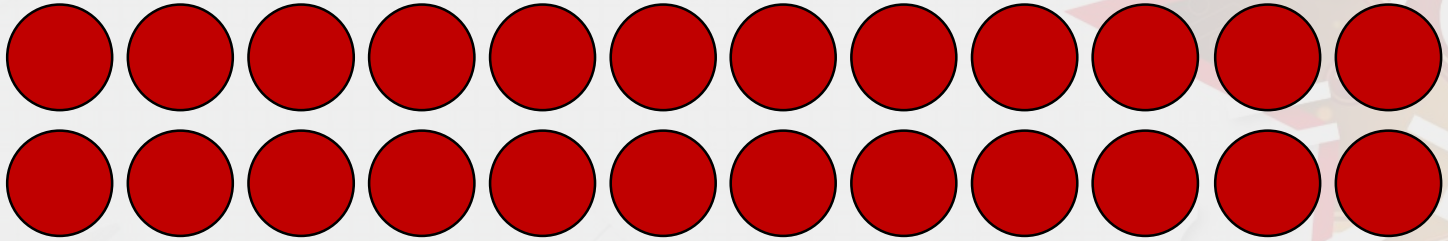
Varied Fluency 1

Circle the common factors of 6 and 24 by systematically checking each times table.

1	2	3	4	5	6	7	9	10





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Varied Fluency 3

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

36 and 90	4
32 and 44	7
21 and 63	9

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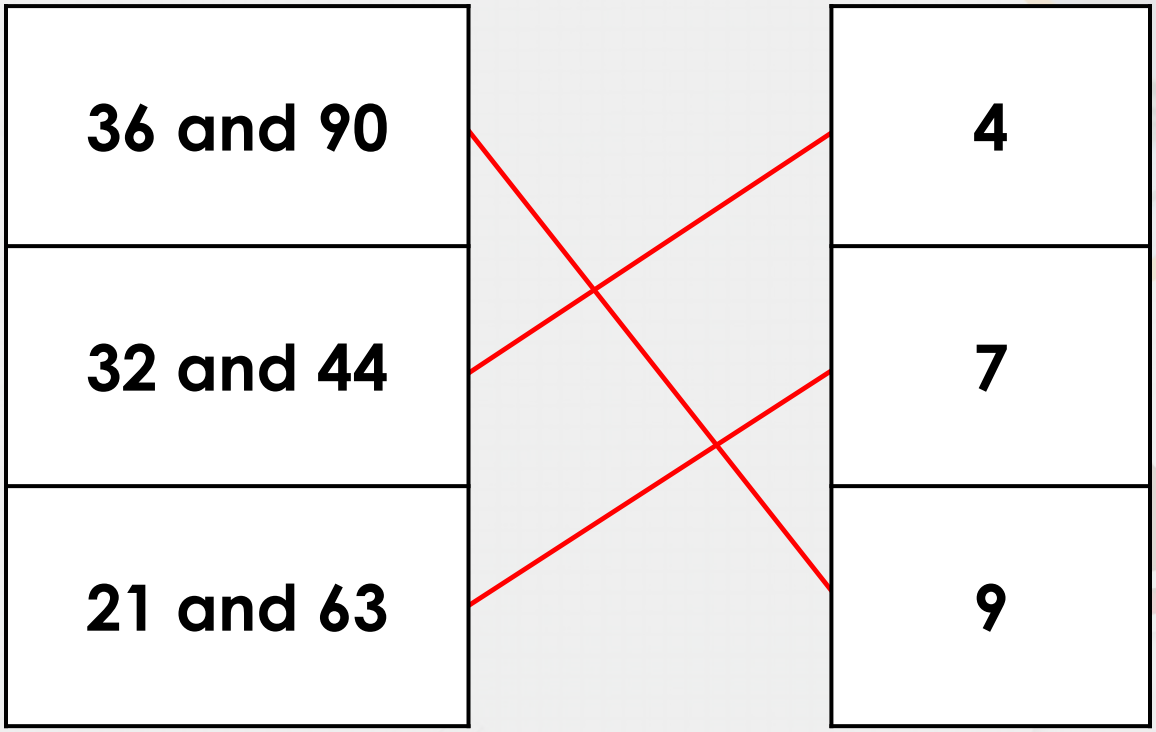
Varied Fluency 3

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



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Varied Fluency 4

Write all the common factors for the numbers below.

18	27

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Varied Fluency 4

Write all the common factors for the numbers below.

18	27

1, 3 and 9

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Lesson 5
Prime Numbers

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Definitions

Prime numbers: A **prime number** has only two factors: 1 and itself.

E.g. 2, 3, 5, 7, 11, 13, 17,

Composite numbers: A **composite number** has more than two factors.

E.g. 4, 8, 12, 24, 32, 40

The **number** 1 is neither **prime** nor **composite**.

Varied Fluency 1

Circle the numbers which have 3 as a prime factor.

2 6 11 19 21 42

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Varied Fluency 1

Circle the numbers which have 3 as a prime factor.

2 6 11 19 21 42

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Varied Fluency 2

Which of the following are composite numbers with a prime factor of 5?

50	9	17
23	15	75

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Varied Fluency 2

Which of the following are composite numbers with a prime factor of 5?

50	9	17
23	15	75

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Varied Fluency 3

Which numbers are in the wrong place?

Prime Factor of 60	Not a Prime Factor of 60
5	15
20	33
10	3
2	30

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Varied Fluency 3

Which numbers are in the wrong place?

Prime Factor of 60	Not a Prime Factor of 60
5	15
20	33
10	3
2	30

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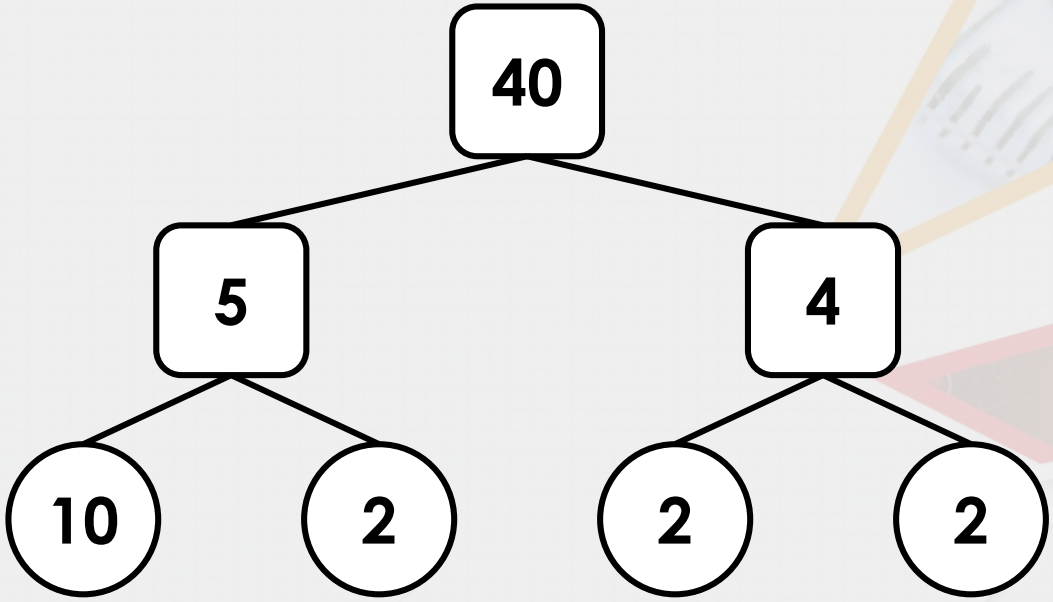
Varied Fluency 4

True or false?

The factor tree below is correct.



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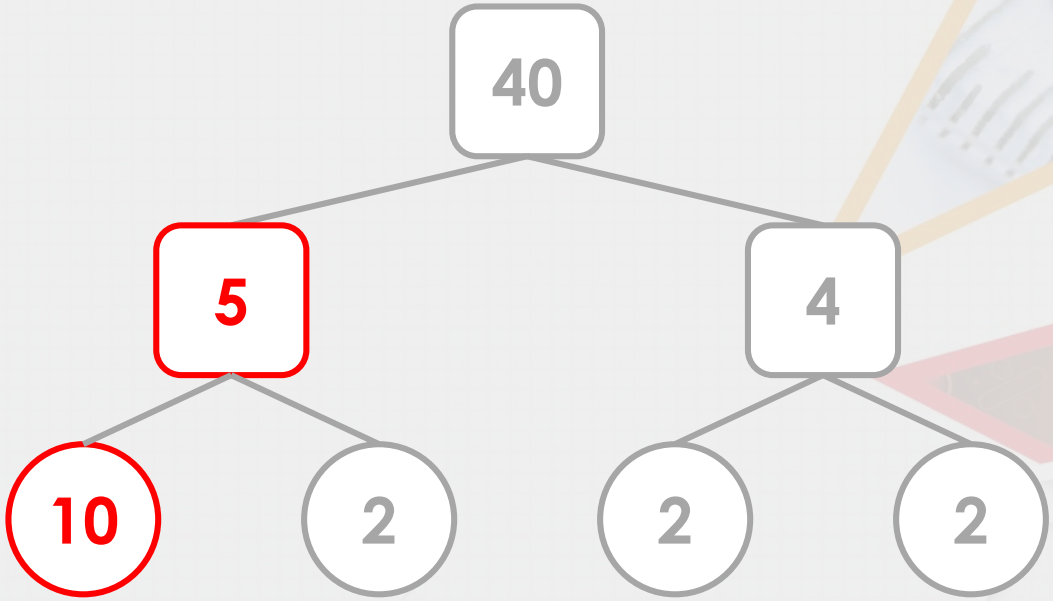
Varied Fluency 4

True or false?

The factor tree below is correct.

False



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