Year 5
Week 11
Lesson 1 - Multiplying fractions

Challenge 1

Work out the answer to each of these questions. If it is possible, convert to mixed number and simplify.

1) 2 x 1/3 =

2		1		2
1	X	3	=	3

2) 3 x 2/5 =

3				
1	X		=	

3) 4 x 2/6 =

	X		=	

4) 3 x 3/8 =

	X		=	

5) 4 x 4/7 =

	X		=	

2) 3/1 X 2/5 = 6/5 = 1 AND 1/5
3) 4/1 X 2/6 = 8/6 = 1 AND 2/6 = 1 AND 1/3
4) 3/1 X 3/8 = 9/8 = 1 AND 1/8
5) 4/1 X 4/7 = 16/7 = 2 AND 2/7

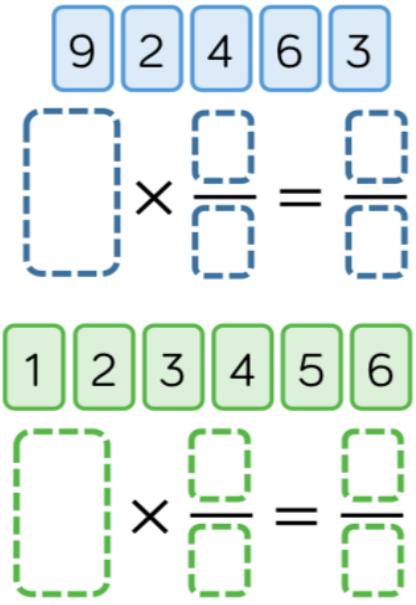
Challenge 2

Work out the fractions below

1. 2 x 6/8 = 2/1 x 6/8 = 12/8 = 1 and 4/8 = 1 and 1/2
2. 3 x 4/9 = 3/1 x 4/9 = 12/9 = 1 and 3/9 = 1 and 1/3
3. 4 x 3/5 = 4/1 x 3/5 = 12/5 = 2 and 2/5
4. 3 x 7/9 = 3/1 x 7/9 = 21/9 = 2 and 3/9 = 2 and 1/3
5. 4 x 4/12 = 4/1 x 4/12 = 16/12 = 1 and 4/12 = 1 and 1/3
6. 7 x 8/10 = 7/1 x 8/10 = 56/10 = 5 and 6/10 = 5 and 3/5
7. 6 x 5/10 = 6/1 x5/10 = 30/10 = 3
8. 5 x 4/6 = 5/1 x 4/6 = 20/6 = 3 and 2/6 = 3 and 1/3

Challenge 3

Use the digits below once to complete these two multiplications.



There are multiple answers to this question. As long as you're using the method we have looked at and you have used some of these numbers, your answer would be correct.

Year 5
Week 11
Lesson 2 - Multiplying fractions (mixed numbers)

Challenge 1

1) 2 x 1 and 1/3 =

2		4		8
1	X	3	=	3

= 2 and 2/3

2) 3 x 1 and 2/5 =

	X		=	

3) 3 x 2 and 2/6 =

	X		=	

4) 3 x 2 and 3/8 =

	X		=	

5) 4 x 2 and 1/7 =

	X		=	

2) 3/1 x 7/5 = 21/5 = 4 and 1/5
3) 3/1 X 14/6 = 42/6 = 7
4)3/1 X 19/8 = 57/8 = 7 AND 1/8
5) 4/1 X 15/7 = 60/7 = 8 AND 4/7

Challenge 2

Multiply the whole number by the mixed number. Show all of your working out and follow the success criteria step by step. Simplify and convert back to a mixed number if possible on this challenge.

1. **2 x 1 and 4/6 = 2/1 x 10/6 = 20/6 = 3 and 2/6 = 2 and 1/3**
2. **3 x 1 and 2/5 = 3/1 x 7/5 = 21/5 = 4 and 1/5**
3. **4 x 2 and 3/5 = 4/1 x 13/5 = 52/5 = 10 and 2/5**
4. **3 x 2 and 5/9 = 3/1 x 23/9 = 2 and 5/9**
5. **4 x 3 and 4/12 = 4/1 x 40/12 = 160/12 = 13 and 4/12 = 13 and 1/3**
6. **5 x 4 and 3/10 = 5/1 x 43/10 = 215/10 = 21 and 5/10 = 21 and 1/2**
7. **6 x 3 and 5/8 = 6/1 x 29/8 = 174/8 = 21 and 6/8 = 21 and 3/4**
8. **5 x 3 and 2/6 = 5/1 x 21/6 = 105/6 = 17 and 3/5**

Challenge 3

1) Jack runs 2 and 2/3 miles three times per week.

Dexter runs 3 and ¾ miles twice a week.
Who runs the farthest during the week? Explain/prove your answer.

Jack runs – 8/3 x 3/1 = 24/3 = 8 miles
Dexter runs – 15/4 x 2/1 = 30/4 = 7 and 2/4 = 7 and ½ miles
Jack runs more over the week.

2) Allison drinks 3 and 4/7 litres of water each day for four days.

Alan drinks 2 and 3/5 litres of water each day for five days.

Who drinks the most over the time? Explain/prove your answer.

Allison drinks – 25/7 x 4/1 = 100/7 = 14 and 2/7 litres

Alan drinks – 13/5 x 5/1 = 65/5 = 13 litres

Allison drinks more water.

Year 5
Week 11
Lesson 3 – fractions overview

Question 1
Write the division calculation below as a fraction.
I share 6 apples between 7 friends. _____ 6/7

Question 2
Convert these improper fractions into mixed numbers.
7/5 = 1 and 2/5
20/6 = 3 and 2/6 = 3 and 1/3

Question 3
Convert these mixed numbers into improper fractions.
2 3/5 = 13/5
4 1/7 = 29/7

Question 4
Look at the set of fractions below. Circle two fractions that are equivalent to each other.

$\frac{2}{6}$ $\frac{8}{20}$ $\frac{5}{12}$ $\frac{6}{18}$ $\frac{12}{18}$

Question 5
Write two fractions that are equivalent to the following.

$\frac{5}{9}$ $\frac{10}{18}$ $\frac{15}{27}$

Question 6

Jack and Jill both have a bag of sweets that are the same size.
Jack has 5/18 of a packet left.
Jill has 1/3 of a packet left.
What has the most?

	1	=	6															
	3		18															
	Jill	Has	The	most														

Question 7
Martin, Ryan and Hayley all completed a maths test.
Martin scored 5/12 on the test.
Ryan scored 20/24 on the test.
Hayley scored 3/8 on the test.
Put the children in order starting with the one who scored the least.
Hayley, Martin, Ryan

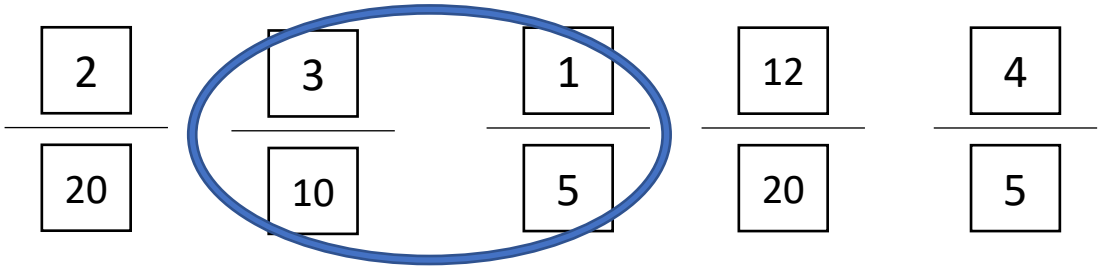
_____ _____

_____

	Martin	5	=	10														
		12		24														
	Hayley	3	=	9														
		8		24														

Question 8

Sophie has put this set of fractions in order starting with the smallest.
Which fraction is in the wrong place?
Explain why.



3/10 = 6/20
1/5 = 4/20
They needed to be swapped in the order.

Question 9

Sophie bought a double chocolate fudge cake for her party.
There was 11/2 of the cake left when Lola (the cheeky pug) started to eat it.
Lola ate 1/6 before getting caught.
How much cake was left?

	11	=	33																
	2		6																
	33	-	1	=	32	=	5 and	2	=	5 and	1								
	6		6		6			6			3								

Question 10

2 1/5 + 4/10

2 and	1	=	11	=	22	+		4	=	26		2 and	6	=	2 and	3	
	5		5		10			10		10			10			5	

Question 11

Sophie was sorting the ice-cream out in her freezer.
She has 1/2 a pot of strawberry ice-cream.
5/6 of a pot of vanilla
And 5/12 of a pot of chocolate.
How much ice-cream does she have altogether?

	1	=	6																
	2		12																
	5	=	10			10	+	6	+	5	=	21	=	1 and	9	=	1 and	3	
	6		12			12		12		12		12			12			4	

Question 12

2/7 x 6

	2	x	6	=	1	2	=	1and	5										
	7		1			7			7										

Question 13

Lucy spent 4/5 of an hour every day for 5 days on her school project.
How long did she spend in total?

	5	x	4	=	20	=	4												
	1		5		5														

Year 5
Week 11
Lesson 4 – writing decimals

Challenge 1 part 1

Write the fraction out in words.

1. **2.53 = two point five three**
2. **4.67 = four point six seven**
3. **8.97 = eight point nine seven**
4. **1.23 = one point two three**
5. **6.56 = six point five six**
6. **7.56 = seven point five six**

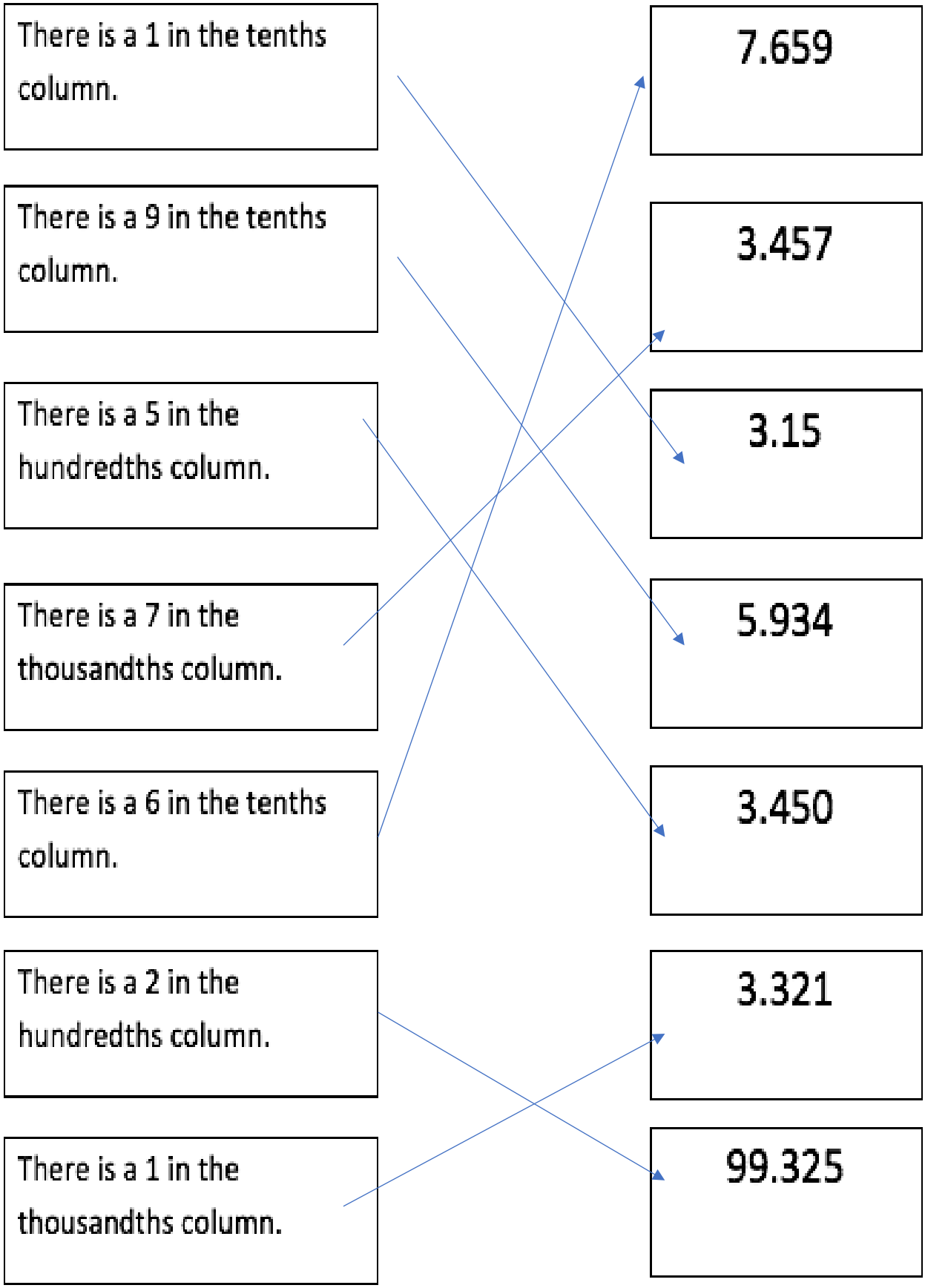
Challenge 1 part 2

Write out the decimal below in its number form.

1. **Four point three two five = 4.325**
2. **Zero point two one seven = 0.217**
3. **Sixteen point one two five nine = 16.1259**
4. **Forty point three four five = 40.345**
5. **Nine point two five seven one = 9.2571**
6. **Three point three five three = 3.353**

Challenge 2

Match up each answer correctly



Challenge 3

For each decimal, give the value of the digit that is in bold.

a) **3.65<u>2</u> _____two thousandths_____**

b) **3.<u>6</u>5 _____six tenths_____**

c) **7.<u>8</u>52 _____eight tenths_____**

d) **3.4<u>7</u> _____seven tenths_____**

e) **2.<u>8</u> _____eight tenths_____**

f) **9.25<u>7</u> _____seven thousandths_____**

Challenge 4

Follow the clues to work out what the decimal is.

1. My number has 4 digits, the digit 4 represents 4 tenths. There is one number before the decimal place in the ones column that represents 5. My digit in the hundredths column is a 2 and in the thousandths column it is a 9. What does my decimal look like?

Your answer
5.429

2. My number has 4 digits, the digit 7 represents the 7 hundredths. There are 2 numbers before the decimal point which represent 2 in the tens and 5 in the ones. Finally, in my tenths column is 5. What does my decimal look like?

Your answer
25.57