

column addition

	H	T	O
	5	7	8
+	3	5	1
	9	2	9
	1		

column subtraction

	H	T	O
	4 5	12	8
-	3	5	1
	1	7	7

estimating answers

$$434 + 295$$

Rounded to the nearest thousand: $400 + 300 = 700$

The answer should be approximately 700

$$434 + 295 = 729$$

using the inverse operation to check answers

$$434 + 295 = 729$$

'inverse' means opposite, so check by subtracting one part from the whole.

729	
434	295

$$729 - 434 = 295$$

mentally add and subtract

a three-digit number
and ones

$$434 + 5 = 439$$

$$434 - 3 = 431$$

a three-digit number
and tens

$$464 + 30 = 494$$

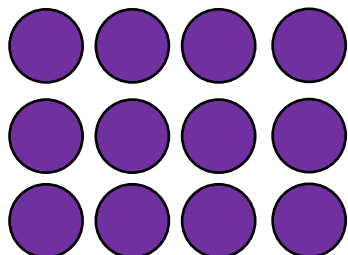
$$464 - 40 = 424$$

a three-digit number
and hundreds

$$743 + 200 = 943$$

$$743 - 300 = 443$$

write mathematical statements



$3 \times 2 = 6$

$2 \times 3 = 6$

$6 \div 3 = 2$

$6 \div 2 = 3$

known facts

$3 \times 20 = 60$

$2 \times 30 = 60$

$60 \div 3 = 20$

$60 \div 2 = 30$

short division

	2	3		
4	9	2		
	1			

$92 \div 4 = 23$

dividend divisor quotient

multiplication strategies

34×8

$30 \times 8 = 240$

$4 \times 8 = 32$

$240 + 32 = 272$

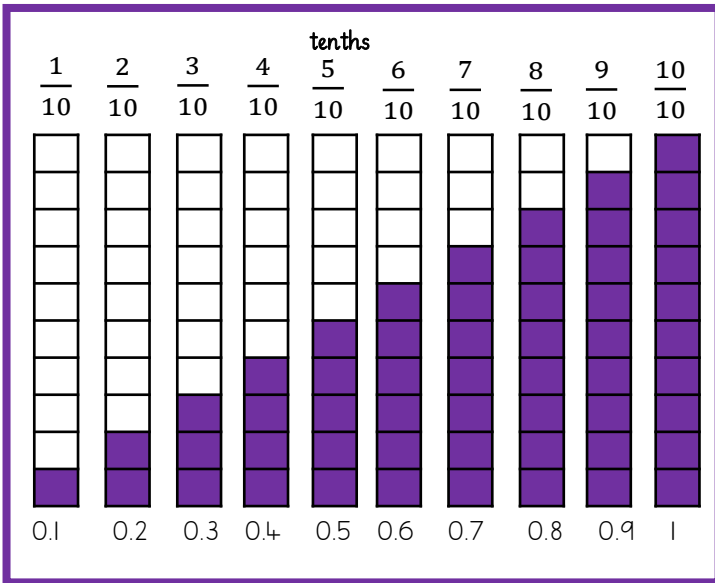
x	30	4
8	240	32

short multiplication

	3	4
x		8
2	7	2
	3	

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Y3- Fractions



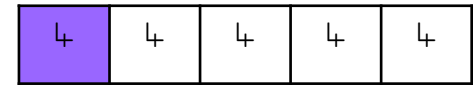
tenths are found by dividing a number by 10

H	T	O	$\frac{1}{10}$
		2	
		0	2

2 divided by 10 is equal to $\frac{2}{10}$

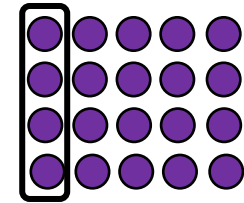
fractions of numbers

$$\frac{1}{5} \text{ of } 20$$



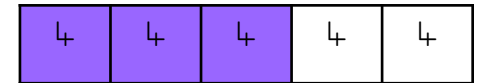
$$20 \div 5 = 4$$

$$\frac{1}{5} \text{ of } 20 = 4$$



fractions of numbers

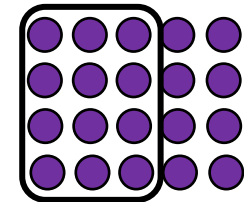
$$\frac{3}{5} \text{ of } 20$$



$$20 \div 5 = 4$$

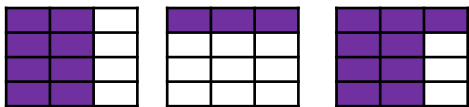
$$4 \times 3 = 12$$

$$\frac{3}{5} \text{ of } 20 = 12$$



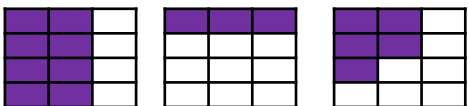
adding fractions with the same denominators

$$\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$$



subtracting fractions with the same denominators

$$\frac{8}{12} - \frac{3}{12} = \frac{5}{12}$$

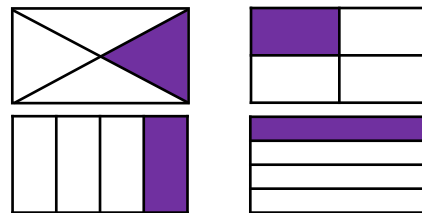


fractions on a number line



fractions of shapes

$$\frac{1}{4}$$



equivalent fractions

$$\frac{1}{2}$$

$$\frac{2}{4}$$

$$\frac{4}{8}$$

$$\frac{8}{16}$$

