Subtracting decimals with a different number of decimal places

1 Use place value counters to help you work out the subtractions.

Ones	Tenths	Hundredths
●●● ●●●	●●●	●●● ●●●

a)

```
    5 · 3  6
 −  1 · 2
    4 · 1  6
```

b)

```
   ⁴5̶ · ¹3  6
 −  3 · 5
    1 · 8  6
```

c)

```
   ⁴5̶ · ¹3  6
 −  3 · 8
    1 · 5  6
```

d)

```
   ⁴5̶ · ¹3  6
 −  4 · 7
    0 · 6  6
```

2 Alex is using counters to help her work out 4.7 − 1.35
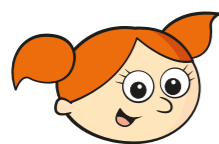
> I can't do this as I don't have any hundredths counters.

Do you agree with Alex? __No_____.

Talk about it with a partner.

3 Complete the subtractions.

a)

```
   ¹2̶ · ¹3  6
 −  1 · 4
    0 · 9  6
```

c)

```
    7 · ²3̶ ¹0
 −  1 · 1  5
    6 · 1  5
```

b)

```
   ⁵6̶ · ¹1  5
 −  3 · 8
    2 · 3  5
```

d)

```
   2  4 · ³4̶ ¹0
 −    3 · 1  2
   2  1 · 2  8
```

4 Use the column method to work out the subtractions.

a) 13.59 − 1.82

```
       ²
   1 3̶·5 9
 −   1·8 2
   1 1·7 7
```

c) 5.6 − 1.39

```
     ⁵
   5·6̶ ¹0
 − 1·3 9
   4·2 1
```

b) 73.84 − 9.2

```
   ⁶
   7̶ ¹3·8 4
 −   9·2
   6 4·6 4
```

d) 18.2 − 3.64

```
     ³   ¹¹
   1 8̶·2̶ ¹0
 −   3·6 4
   1 4·5 6
```

5 A plank of wood measures 2.6 m.

A carpenter cuts a piece of wood from the plank that is 0.52 m long.

2.6 m
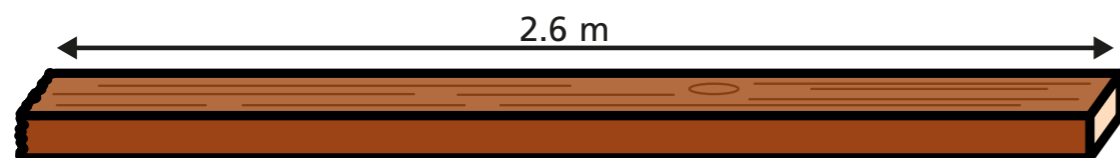
a) What is the length of the remaining plank?

2·08   m

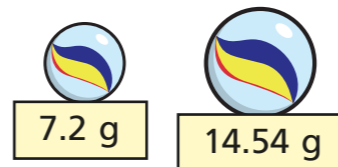**b)** The carpenter cuts a second piece of wood from the plank.

She now has 0.3 m of the plank remaining.

What is the length of the second piece of wood that she cut?

1·78   m

6 The mass of a bag of marbles is 54.3 g.

These two marbles are removed from the bag.

7.2 g   14.54 g

What is the mass of the bag of marbles now?

32·56   g

7 Work out the missing digits.

1 3.4 – 2.5 9 = 10.81

8 Use the column method to work out the subtractions.

a) 14 – 2.7

		1	³4̶·¹0	
–			2·7	
		1	1·3	

d) 26 – 3.91

	2	⁵6̶·¹9̶⁹0	
–		3·9 1	
2	2	0 9	

b) 8 – 3.65

	⁷8̶·¹⁹0̶ ¹0	
–	3·6 5	
	4·3 5	

e) 25 – 3.842

2	⁴5̶·¹⁹0̶ ¹⁹0̶ ¹0	
–	3·8 4 2	
2	1·1 5 8	

c) 20 – 2.85

¹2̶	¹⁹0̶·¹⁹0̶ ¹0	
–	2·8 5	
1	7·1 5	

f) 90 – 0.821

⁸9̶	¹⁹0̶·¹⁹0̶ ¹⁹0̶ ¹0	
–	0·8 2 1	
8	9·1 7 9	