

Learning Reminders

Use short multiplication to multiply 4-digit amounts of money by 1-digit numbers.

A shop sells 6 hoodies, each priced £25.79.

We are going to find the total amount.

$$6 \times \text{£}25.79$$

×	£20	£5	70p	9p	
6	£120	£30	£4.20	54p	£154.74

$$6 \times 70\text{p} = \text{£}4.20$$

Add the pounds, then the pence.

Take special care with place value when multiplying with money. It is particularly helpful to estimate first...

$$\begin{array}{r} \text{£} 25.79 \\ \times \quad 6 \\ \hline 345 \\ \text{£} 154.74 \end{array}$$

$$(6 \times 70\text{p}) + 50\text{p} = \text{£}4.70$$

Learning Reminders

Use short multiplication to multiply 4-digit amounts of money by 1-digit numbers.

A shop sells 7 pairs of jeans, each priced £34.45.

We are going to find the total amount.

What would be a good estimate? ?

$7 \times \text{£}34.45$

\times	£30	£4	40p	5p	
7	£210	£28	£2.80	35p	£241.15

$$7 \times 40\text{p} = \text{£}2.80$$

Add the pounds, and then the pence.

Does this answer look about right? ?

$$\begin{array}{r} \text{£ } 34.45 \\ \times \quad 7 \\ \hline 333 \\ \hline \text{£ } 241.15 \end{array}$$

$$7 \times 40\text{p} + 30\text{p} = \text{£}3.10$$

Practice Sheet Mild

Multiplying money

1. Which of these multiplications do you think will have the greatest answer?

$3 \times \text{£}4.28$

$5 \times \text{£}5.17$

$4 \times \text{£}8.32$

$6 \times \text{£}2.51$

Calculate each to check.

2. A shop sells the following items. Calculate how much they take for each item:

4 beanies at $\text{£}7.24$ each

6 water bottles at $\text{£}3.65$ each

8 wristbands at $\text{£}2.78$ each

Practice Sheet Hot

Multiplying money



£46.55



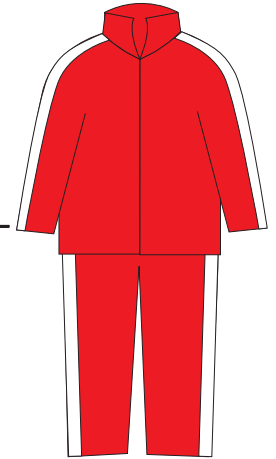
£24.60



£31.66



£19.49



£38.75

- Which of these would cost more than £200? Estimate each then calculate the costs.
 - 5 pairs of trainers
 - 4 tracksuits
 - 7 footballs
 - 8 sports bags
 - 7 tennis rackets
- Which do you think would cost more? Estimate each then calculate the costs.
 - 6 pairs of trainers or 7 tracksuits?
 - 9 sports bags or 6 footballs?
 - 6 tennis rackets, 4 tracksuits or 3 pairs of trainers?

Challenge

Five children each buy a sports bag, a tennis racket and pair of trainers. How much do they spend altogether?

Practice Sheet Answers

Multiplying money (mild)

Which of these multiplications do you think will have the greatest answer?

$$4 \times \text{£}8.32$$

Rounding each amount to the nearest pound helps children to see which will have the greatest answer

$$3 \times \text{£}4.28 = \text{£}12.84$$

$$5 \times \text{£}5.17 = \text{£}25.85$$

$$4 \times \text{£}8.32 = \text{£}33.28$$

$$6 \times \text{£}2.51 = \text{£}15.06$$

A shop sells the following items. Calculate how much they take for each item:

$$4 \text{ beanies at } \text{£}7.24 \text{ each} \quad \text{£}28.96$$

$$6 \text{ water bottles at } \text{£}3.65 \text{ each} \quad \text{£}21.90$$

$$8 \text{ wristbands at } \text{£}2.78 \text{ each} \quad \text{£}22.24$$

Multiplying money (hot)

- $\text{£}232.75$
 - $\text{£}155$
 - $\text{£}221.62$
 - $\text{£}155.92$
 - $\text{£}172.20$
- $\underline{6 \text{ pairs of trainers} = \text{£}279.30}$
 $\text{tracksuits} = \text{£}271.25$
 - $9 \text{ sports bags} = \text{£}175.41$
 $\underline{6 \text{ footballs} = \text{£}189.96}$
 - $6 \text{ tennis rackets} = \text{£}147.60$
 $\underline{\text{tracksuits} = \text{£}155}$
 $3 \text{ pairs of trainers} = \text{£}139.65$

Challenge

$$\text{Sports bag} + \text{tennis racket} + \text{trainers} = \text{£}19.49 + \text{£}24.60 + \text{£}46.55 = \text{£}90.64$$

$$\text{If 5 children all buy the same 3 items total cost} = \text{£}453.20$$

A Bit Stuck? Multiplication splits (money)

Try this activity with a partner, but record your calculations on your own sheet.

What to do:

- Use the grid method to work out the answers to these multiplications.

$$3 \times \text{£}3.25$$

x	£3	20p	5p	
3				

$$5 \times \text{£}4.23$$

x	£4	20p	3p	
5				

$$4 \times \text{£}6.35$$

x	£6	30p	5p	
4				

- Next choose at least two multiplications and draw your own grids to keep track of your steps.

$$7 \times \text{£}1.32$$

$$6 \times \text{£}2.17$$

$$8 \times \text{£}1.31$$

$$5 \times \text{£}4.18$$

Things you will need:

- A pencil



S-t-r-e-t-c-h:

Which of these multiplications will have the biggest answer?

Which will have the smallest answer?

$$8 \times \text{£}2.36$$

$$6 \times \text{£}5.21$$

$$2 \times \text{£}6.33$$

Learning outcomes:

- I can use the grid method to multiply 3-digit amounts of money by 1-digit numbers.
- I am beginning to estimate the answers.