

Functional Skills Maths

Level 1

Solve problems requiring calculation with money

v1.0

Functional Skills Maths:

Level 1

Skill Standard:

7b

Coverage and Range:

Solve problems requiring calculation, with common measures including money.

- Money – add, subtract, multiply, divide and record sums of money.¹

¹ QCA Functional Skills guidance: amplification of the standards June 2008 QCA/08/3700

Explain the Skill

Calculating with Money

When adding and subtracting money keep the decimal points lined up. The decimal point separates the whole pounds from the pence. There are always 2 digits after the decimal point when dealing with money.

Addition of Money

$$£5.40 + £2 + 73p$$

$$\begin{array}{r}
 \text{£ p} \\
 5.40 \\
 2.00 \\
 + 0.73 \\
 \hline
 8.13 \\
 \hline
 \end{array}$$

Subtraction of Money

$$£6.50 - 35p$$

$$\begin{array}{r}
 \text{£ p} \\
 6.50 \\
 ^{41} \\
 - 0.35 \\
 \hline
 6.15 \\
 \hline
 \end{array}$$

Multiplication of Money

When multiplying an amount of money by a whole number the decimal point is kept in the same position in the answer.

Wendy earns £8.50 per hour. How much will she earn in 7 hours?

$$\begin{array}{r}
 \text{£ } 8.50 \times \\
 ^7 \\
 \hline
 \text{£ } 59.50 \\
 ^3
 \end{array}$$

Answer £59.50

Division of Money

To divide a decimal by a whole number keep the decimal point lined up and divide as usual.

4 friends go out for a meal. The bill comes to £56.20 which they share equally. How much does each person pay?

$$\begin{array}{r}
 14.05 \\
 4 \overline{) 56.20}
 \end{array}$$

Answer £14.05

Practise the Skill

1) Work out the following.

$\pounds 15.09 + 85\text{p} = \pounds \underline{\hspace{2cm}}$

$\pounds 12.40 + 77\text{p} + \pounds 3.86 = \pounds \underline{\hspace{2cm}}$

$\pounds 30 - \pounds 7.06 = \pounds \underline{\hspace{2cm}}$

$\pounds 100 - \pounds 18.28 = \pounds \underline{\hspace{2cm}}$

$\pounds 9.30 \times 7 = \pounds \underline{\hspace{2cm}}$

$\pounds 10.35 \times 8 = \pounds \underline{\hspace{2cm}}$

$\pounds 60.40 \div 5 = \pounds \underline{\hspace{2cm}}$

$\pounds 102.48 \div 6 = \pounds \underline{\hspace{2cm}}$

2) Rosie and Josh go to the coffee shop for lunch.

Menu

Drinks

| | |
|------------|-------|
| Latte | £2.95 |
| Cappuccino | £2.95 |
| Espresso | £2.25 |
| Tea | £1.95 |
| Milkshake | £2.20 |

Snacks

| | |
|------------|-------|
| Baguettes | £3.25 |
| Sandwiches | £2.85 |
| Panini | £3.20 |
| Cakes | £2.40 |
| Cookies | £1.50 |

Rosie buys a latte, a sandwich and a cake. She pays with a £20 note.

a) How much change does she get?

£

Josh has only £5.00 to spend.

b) If he buys a sandwich which drink(s) can he also buy? Circle your answer.

Latte Cappuccino Espresso Tea Milkshake

- 3) Kim is running in a marathon to raise money for a charity. She will run 26 miles.
She asks her work colleagues to sponsor her.



| Name of Sponsor | Amount sponsored per mile |
|-----------------|---------------------------|
| Charlie | 20p |
| Betty | 50p |
| Bill | 30p |
| Tanya | 40p |

- Her boss says she will double the total amount she collects from her colleagues.
How much will her boss have to give Kim?

£ _____

- 4) Mia is going to college and her accommodation costs £386 for 4 weeks.
a) How much does it cost for 1 week?

£ _____

She spends £16.70 on a weekly bus pass.

- b) How much does she spend per term (6 weeks) on travel?

£ _____

Mia and 5 friends go out for a meal. The bill comes to £83.22 which they share equally between 6.

- c) How much does Mia have to pay?

£ _____

Explain the Skill**Multiply or Divide Amounts of Money by 10 and 100.**

To multiply a decimal by 10 move the digits one place to the left.

$$£30.45 \times 10 = £304.50$$

To multiply a decimal by 100 move the digits two places to the left.

$$£30.45 \times 100 = £3045.00$$

To divide a decimal by 10 move the digits one place to the right.

$$£29.00 \div 10 = £2.90$$

To divide a decimal by 100 move the digits two places to the right.

$$£29.00 \div 100 = £0.29$$

Practise the Skill

1) Work out the following.

$$£16.78 \times 10 = £ \underline{\hspace{2cm}}$$

$$£10.43 \times 10 = £ \underline{\hspace{2cm}}$$

$$£75.50 \times 100 = £ \underline{\hspace{2cm}}$$

$$£61.00 \times 100 = £ \underline{\hspace{2cm}}$$

$$£8.50 \div 10 = £ \underline{\hspace{2cm}}$$

$$£26.30 \div 10 = £ \underline{\hspace{2cm}}$$

$$£64.00 \div 100 = £ \underline{\hspace{2cm}}$$

$$£8.00 \div 100 = £ \underline{\hspace{2cm}}$$

2) A multipack of crisps costs £3.90. There are 10 packets in it.
How much does each packet cost?

£

3) A company sends 100 delegates to attend a conference. It costs £67.80 per person.
How much does the company have to pay altogether?

£

4) Rory is going on holiday to Italy and decides to go on a 10 week course to learn Italian. The course costs £236.

If Rory pays weekly, how much will he pay each week?

£

5) An electrician buys a 100 metre reel of cable which costs £76.00.
How much does 1 metre of cable cost?

£

Explain the Skill

Value for Money Calculations

To work out the best value on multiple packs of items you need to work out how much it costs per item. Then compare the cost of each item in a pack with other packs.

A shop sells cans of fizzy drink in packs of 8 or 6. The 8 pack costs £2.80 and the 6 pack costs £1.98.

8 cans @ £2.80 Cost per can = $£2.80 \div 8 = £0.35$

6 cans @ £1.92 Cost per can = $£1.92 \div 6 = £0.32$

The 6 pack costs less per can so it better value than the 8 pack.

To work out how much you would pay per gram, divide the cost by the number of grams.

Price per gram = total price \div number of grams

A 300 gram jar of coffee costs £5.10. A 200 gram jar of coffee costs £3.00
Which jar is the best value?

300 g jar price per gram = $£5.10 \div 300 \text{ g} = 1.7\text{p}$

200 g jar price per gram = $£3.00 \div 200 \text{ g} = 1.5\text{p}$

A 200 g jar costs less per gram so it is the best value.

Practise the Skill

- 1) Ben goes to the shop to buy chocolate bars.



Which offer is the best value?

Circle your answer.

1 Chocolate bar / Buy 2 get one free / Pack of 5

- 2) A bakery sells small cakes for 85p each or in a pack of 6 for £4.50

a) Which is the best value?

Circle your answer.

Individually / Pack

b) How much cheaper is it per cake?

_____ p

- 3) A supermarket sells packets of pasta with sauce. A 500 g packet costs £2.40 and a 300 g packet costs £1.35.

Which packet is the best value?

Circle your answer.

500 g packet / 300 g packet

- 4) Louise is learning to drive and wants to pay as little as possible for her lessons.

| | | |
|--|---|--|
|  <p>Drive Well</p> <p>10 lessons for only £195</p>  |  <p>First Class</p> <p>8 driving lessons £158</p>  | <p>A1 Drive School</p> <p>Get 13 lessons for £247</p>  |
|--|---|--|

- a) Which deal should Louise go for?

Circle your answer.

Drive Well / First Class / A1 Drive School

- b) How much will each lesson cost with this deal?

£ _____

Apply the Skill

- 1) It's Saturday and the Clarke family decide to go swimming.



Prices

| <i>Ticket</i> | <i>Bargain Wednesday</i> | <i>Peak (Friday, Saturday, Sunday)</i> |
|---------------------------------------|--------------------------|--|
| <i>Adult</i> | £6.65 | £7.70 |
| <i>Child</i> | £5.30 | £5.80 |
| <i>Family (2 adults + 2 children)</i> | £21.45 | £24.30 |

Mrs Clarke wants to buy a family ticket, but Mr Clarke says it's cheaper to buy 2 adult and 2 children tickets.

Who is right and by how much?

Mrs. Clarke / Mr. Clarke by £ _____

- 2) Jimmy has forgotten his swim suit and goggles.

| <i>Item</i> | <i>Price</i> |
|------------------|--------------|
| Junior Goggles | £9.45 |
| Speedie Goggles | £8.95 |
| Demux Goggles | £12.50 |
| Aquashort | £8.00 |
| Float Suit | £17.33 |
| Age 1 - 2 years | |
| Float Suit | £15.49 |
| Age 2- 3 years | |
| Hot Tot Swimsuit | £18.50 |



Mr Clarke buys a float suit age 2 – 3 years for Jimmy and two pairs of speedie goggles. He gives the shop assistant £40.

How much change will he get?

£ _____

- 3) After their swim, they go to the pool café.

| Café Price List | |
|------------------|------------|
| Cake | 95p each |
| Drinks | £1.30 each |
| Drink and a cake | ONLY £2.00 |
| Pack of 4 cakes | ONLY £3.60 |
| Buy 4 drinks for | ONLY £5.20 |

They each have a drink and a cake.

Which offer is the best value? Circle your answer.

A cake @ 95p and a drink @ £1.30

A pack of 4 cakes @ £3.60 and 4 drinks for £5.20

A drink and a cake @ £2.00

- 4) Amanda and Josh work in the café. Amanda is 19 years old and Josh is 17.

These are their rates of pay.

| Rates of pay for café staff | | | | |
|---|-------------|----------|----------|-----------------|
|  | 21 and over | 18 to 20 | Under 18 | Work Experience |
| Amount per hour | £6.50 | £5.13 | £3.79 | £2.73 |

They both work for 7 hours on Saturday.

What is the difference in their pay?

£ _____

- 5) Mrs Clarke wants Jimmy to have swimming lessons.



- a) She says it's cheaper to go for the Little Duckling lessons.

Is she right?

Yes / No

- b) What is the difference in price per lesson?

_____ p

- 6) Mr Clarke says their car does approximately 12 miles per litre of diesel. Diesel costs £1.35 per litre. The Clarkes live 18 miles from the swimming pool.

What is the total cost of the fuel to get to the swimming pool and back to their house?

£ _____