

Hard Answers

<p>1. $3,054 + 2,425 = 5,479$ There are 5,479 science books altogether.</p>	<p>2. $8,501 - 3,233 = 5,268$ picture books There are 5,268 picture books left in the library.</p>
<p>3. $3,672 + 6,820 = 10,492$ marbles They had 10,492 marbles altogether.</p>	<p>4. $5,232 - 2,551 = 2,691$ sports equipment There are 2,691 piece of sport equipment left.</p>
<p>5. $9,512 - 1,500 = 8,012$ books There are 8,012 books left in the library.</p>	<p>$6,235 + 3,621 = 3,856$ pieces of fruit There are 3,856 pieces of fruit altogether in the lorry.</p>
<p>6. $1,362 + 3,412 = 4,774$ fans 4,774 fans watched the match.</p>	<p>8. $5630 - 5325 = 305$ visitors The gallery had 305 more visitors in June than September.</p>
<p>9. $1,362 + 2,215 = 3,577$ fans 3,577 fans watched Ed Sheeran play.</p>	<p>10. $2452 - 1362 = 1,090$ albums. Adele sold 1,090 more albums on Sunday.</p>

Harder

- 1) Kieran needs to run 2500 metres. In the first ten minutes he runs 639 and in the second ten minutes he runs 794 metres. How much farther does he still need to run?

Calculation 1 : $639\text{m} + 794\text{ m} = 1,433\text{m}$

Calculation 2 : $2500\text{m} - 1,433\text{m} = 1,067\text{m}$

Kieran needs to run 1,067 m more.

- 2) Chocolate Bar: £1.39

Pack of Marshmallows: £2.47

Packet of sweets: £1.76

Special offer; Any of three items for £4.10

How much money will Len save by buying one of each item using the special offer?

Calculation 1: $£1.39 + £2.47 = £3.86$

Calculation 2: $£3.86 + £ 1.76 = £5.62$

Calculation 3: $£5.62 -£ 4.10 = £1.52$

Len saves £1.52 with the special offer.

- 3) Yuan and Chan are trying to find out how many star jumps they can do in two minutes. In the first minute, Yuan completes 48 star jumps and in the second minute he completes 56 star jumps. Chan completes 184 star jumps in two minutes.

What is the difference between the amount of star completed by Yuan and Chan?

Calculation 1: $48+56=104$

Calculation 2: $184-104 = 80$

Chan completed 80 more star jumps than Yuan.

- 4) Mrs Flood has 1938 pencils at the beginning of the school year. In term one, 348 pencils are used and in term two, 827 pencils are used. How many pencils are remaining in term three?

Calculation 1: $348 + 827=1,175$

Calculation 2: $1,938 - 1,175= 763$

There are 763 pencils remaining in term three.

- 5) Fish: £3.55

Chips: £1.29

Gravy: £0.75

Peas: £ 0.90

Nigel has £5. He wants to buy fish, chips, and peas. How much more money will Nigel need?

Calculation 1: $£3.55+ £1.29 = £4.84$

Calculation 2: $£4.84+ £0.90 = £5.74$

Calculation 3: $£5.74-£5.00 = £0.74$

Nigel needs £0.74 or 74p more.

- 6) A Bottle holds 2000ml of freshly squeezed orange juice. Denver fills three glasses with orange juice. He puts 170 millilitres in each glass. How much orange juice is left in the bottle?

Calculation 1: $2000 - 170 = 1,830\text{ ml}$

There will be 1,870ml of juice left in the bottle.

- 7) In the library, there are 6054 science books on the top shelf, and 425 science books on the bottom shelf. 456 books have been taken out to read. How many science books are left in the library?

Calculation 1: $6054+425 = 6482$

Calculation 2: $6482 - 456 = 6026$

There are 6026 science books left on the shelf.

Hardest

- 1) Kieran needs to run 2500 metres. In the first ten minutes he runs 639 and in the second ten minutes he runs 794 metres.

- a. How much farther does he still need to run?

Calculation 1: $639+794= 1,433$

Calculation 2: $2500-1433= 1067$

- b. Kieran gets £2 for every metre he runs to raise money for charity. If he completes the run, how much money has he raised?

Calculation 1: $2,500 \times 2,000 = £5000$

Kieran will raise £5000 for charity if he completes the race.

- 2) Chocolate Bar: £1.39

Pack of Marshmallows: £2.47

Packet of sweets: £1.76

Special offer; Any of three items for £4.10

How much money will Len save by buying one of each item using the special offer?

Calculation 1: $£1.39 + £2.47 = £3.86$

Calculation 2: $£3.86 + £ 1.76 = £5.62$

Calculation 3: $£5.62 -£ 4.10 = £1.52$

Len saves £1.52 with the special offer.

If Len pays with a £10 note, how much change will he get?

Calculation 1: $£10 -£4.10 = £5.90$

- 3) Yuan and Chan are trying to find out how many star jumps they can do in two minutes. In the first minute, Yuan completes 48 star jumps and in the second minute he completes 56 star jumps. Chan completes 184 star jumps in two minutes.

What is the difference between the amount of star completed by Yuan and Chan?

Calculation 1: $48+56=104$

Calculation 2: $184-104 = 80$

Chan completed 80 more star jumps than Yuan.

Katie completed 25 more star jumps than Chan. How many star jumps did Katie complete?

Calculation 1: $184+25 = 209$

Katie completed 206 star jumps.

- 4) Mrs Flood has 11938 pencils at the beginning of the school year. In term one, 1348 pencils are used and in term two, 827 pencils are used.

How many pencils are remaining in term three?

Calculation 1: $1348 + 827 = 2,175$

Calculation 2: $11,938 - 2,175 = 9763$

There are 9763 pencils remaining in term three.

If 3424 pencils are used in term three. How many pencils are left unused by the end of the year?

Calculation 1: $9763 - 3424 = 6339$

There are 6339 pencils remaining at the end of the year.

5) Fish: £3.55

Chips: £1.29

Gravy: £0.75

Peas: £ 0.90

Nigel has £20. He wants to buy 2 portions of fish, 2 portions chips, and 1 portion of peas.

How much more change will Nigel get?

Calculation 1: $£3.55 + £1.29 = £4.84$

Calculation 2: $£4.84 + £4.84 = £9.68$

Calculation 3: $£9.68 + £0.90 = £10.58$

Calculation 4: $£20 - £10.58 = £9.42$

Nigel will get £9.42 change.

6) A Bottle holds four litres of freshly squeezed orange juice. Denver fills three glasses with orange juice. He puts 170 millilitres in each glass. How much orange juice is left in the bottle?

Calculation 1: 1 litre (l) = 1000 millilitres (ml) so 4 L = 4000 ml

Calculation 2: $4000 - 170 = 3830$

There is 3,830 ml of juice left in the bottle.

7) Two classes of children collected marbles. One class took out 3672 marbles, the second class had 6820.

How many marbles did both classes have altogether?

Calculation 1: $3672 + 6820 = 10,492$

They had 10,492 marbles altogether.

How many more marbles did the second class have?

Calculation 1: $6820 - 3672 = 3148$

The second class has 3,148 more marbles.

If each marble cost 2p. How much did the class spend altogether on the marbles?

Calculation 1: $10,492 + 10,492 = 20,984$

The marbles cost the class 20,984p or £209.84

Herculean

1) Toy car: £12.49

Board Game: £25.38

Building blocks: £34.39

Amil and Rikard want to buy one of each toy. Amil rounds the price of each toy to the nearest £10 and adds them together. Rikard adds the exact price of each toy together. What is the difference between Amil's and Rikard's totals?

Calculation 1: $\pounds 12.49 \approx \pounds 10$ $\pounds 25.38 \approx \pounds 30$ $\pounds 34.39 \approx \pounds 30$

Calculation 2: $10+30+30 = \pounds 70$

Calculation 3: $\pounds 12.49 + 25.38 = \pounds 37.87$

Calculation 4: $\pounds 37.87 + \pounds 34.39 = \pounds 76.26$

Calculation 5: $\pounds 76.26 - \pounds 70$

The difference between Amil's and Rikard's totals is $\pounds 6.26$

- 2) Woolly hat: $\pounds 11.75$

Gloves: $\pounds 4.95$

Aydin has a twenty-pound and a ten-pound note.

How much change will he receive if he buys two woolly hats and a pair of gloves.

Calculation 1: $\pounds 11.75 + \pounds 11.75 = \pounds 23.50$

Calculation 2: $\pounds 23.50 + \pounds 4.95 = \pounds 28.45$

Calculation 3: $\pounds 30 - \pounds 28.45 = \pounds 1.55$

Aydin will get $\pounds 1.55$ change.

- 3) Miley and James each have some money. Altogether, they have $\pounds 4.20$. Miley gives James 20p so that they both have the same amount. How much money did they each have at the start?

Calculation 1: $\pounds 4.20 \div 2 = \pounds 2.10$

Calculation 2: $\pounds 2.10 - 20\text{p} = \pounds 1.90$ (James)

Calculation 3: $\pounds 2.10 + 20\text{p} = \pounds 2.30$ (Miley)

At the start Miley had $\pounds 2.30$ and James had $\pounds 1.90$.

- 4) Class A has a race. Kat's time is 47 seconds. Charlie finishes nine seconds before Kat. Maria finishes 14 seconds after Charlie. Birkir finishes 26 seconds before Maria. What is Birkir's time in seconds?

Calculation 1: (Charlie's time) $47 - 9 = 38$ seconds

Calculation 2: (Maria's time) $38 + 14 = 52$ seconds

Calculation 3 : (Birkir's time) $52 - 26 = 26$ seconds

Birkir finishes the race in 26 seconds