

3

Addition, subtraction and money

> 3.1 Addition

Exercise 3.1

compose decompose
exchange regroup single

Focus

- 1 Complete each addition. Show how you found each total.

$$\begin{array}{r} 24 + 5 \\ = 29 \end{array}$$

$$\begin{array}{r} 42 + 5 \\ = 47 \end{array}$$

$$\begin{array}{r} 48 + 9 \\ = 57 \end{array}$$

$$\begin{array}{r} 37 + 8 \\ = 45 \end{array}$$

- 2 Complete each addition. Show how you found each total.

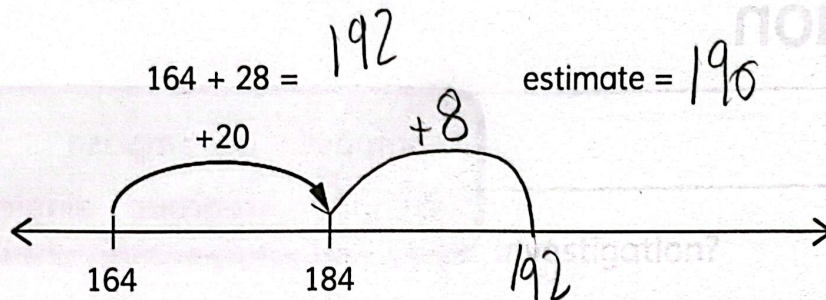
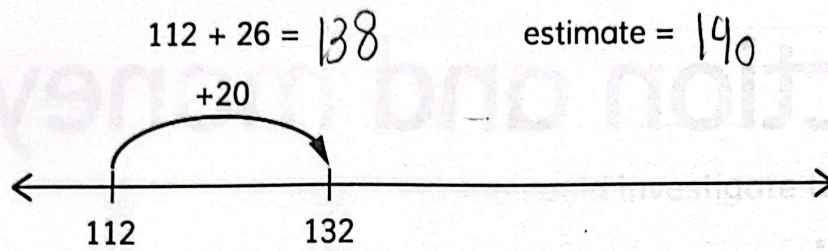
$$\begin{array}{r} 123 + 6 \\ = 129 \end{array}$$

$$\begin{array}{r} 153 + 5 \\ = 158 \end{array}$$

$$\begin{array}{r} 254 + 7 \\ = 261 \end{array}$$

$$\begin{array}{r} 235 + 8 \\ = 243 \end{array}$$

3 Estimate and then complete each addition to find the total.



4 Cheng did not have enough time to finish his calculations. Complete them both for him.

✓ a $315 + 232$ estimate: $320 + 230 = 550$

$= 300 + 10 + 5 + 200 + 30 + 2$

$= 500 + 40 + 7$

$= 547$

✓ b $247 + 218$ estimate: $250 + 220 = 470$

$= 200 + 40 + 7 + 200 + 10 + 8$

$= 400 + 50 + 15$

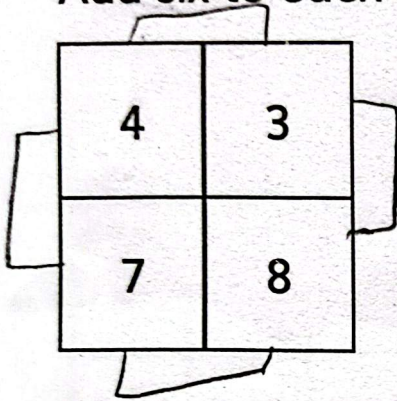
$= 400 + 50 + 10 + 5$

$= 400 + 60 + 5$

$= 465$

Practice

- 5 Read across or down the grid to find a 2-digit number.
Add six to each number. Show how you found your totals.



$$47 + 6 = 53$$

$$43 + 6 = 49$$

$$38 + 6 = 44$$

$$78 + 6 = 84$$

- 6 Complete each addition. Show how you found each total.

$$\begin{array}{r} 246 + 3 \\ = 249 \end{array}$$

$$\begin{array}{r} 171 + 7 \\ = 178 \end{array}$$

$$\begin{array}{r} 345 + 8 \\ = 353 \end{array}$$

$$\begin{array}{r} 269 + 9 \\ = 278 \end{array}$$

- 7 The baker makes 246 small cakes and 26 large cakes.
How many cakes does he make in total?

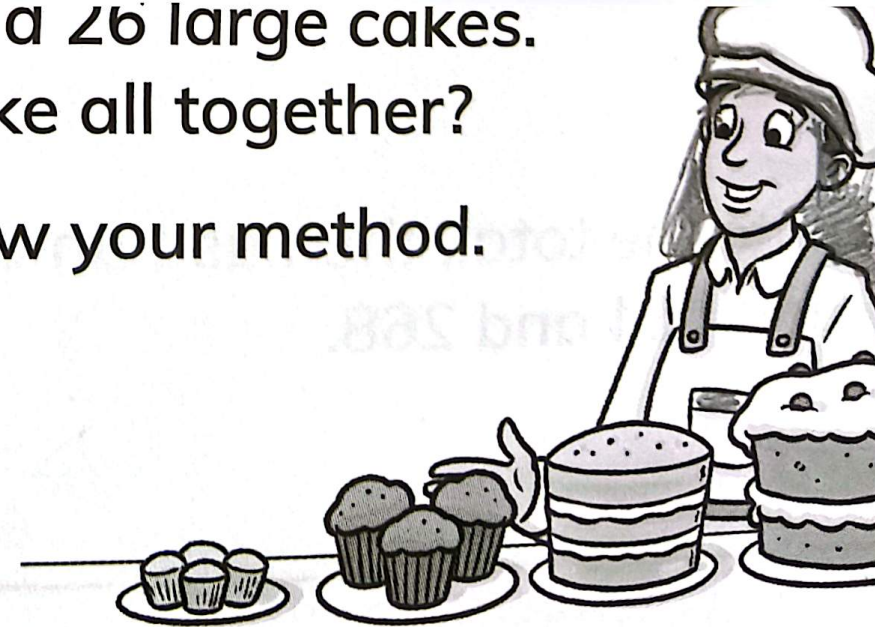


Baker makes 246 small cakes and 26 large cakes.
How many cakes does the baker make all together?

Estimate and then find the total. Show your method.

$$\begin{array}{r} 246 \\ + 26 \\ \hline 272 \end{array}$$

$$\begin{array}{r} 250 \\ + 30 \\ \hline 280 \end{array}$$

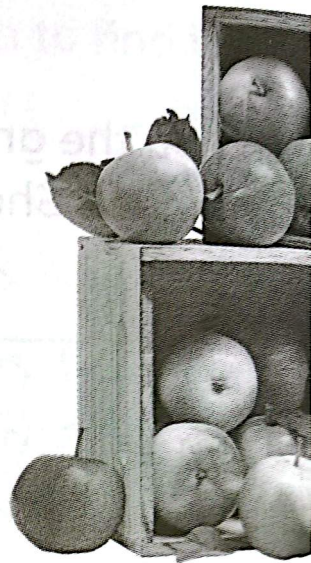


3 Addition, subtraction and money

- 8 A market stall has 38 apples left.
A box of 148 apples are delivered.
How many apples are on
the stall now?

Estimate, then calculate.
Show your method.

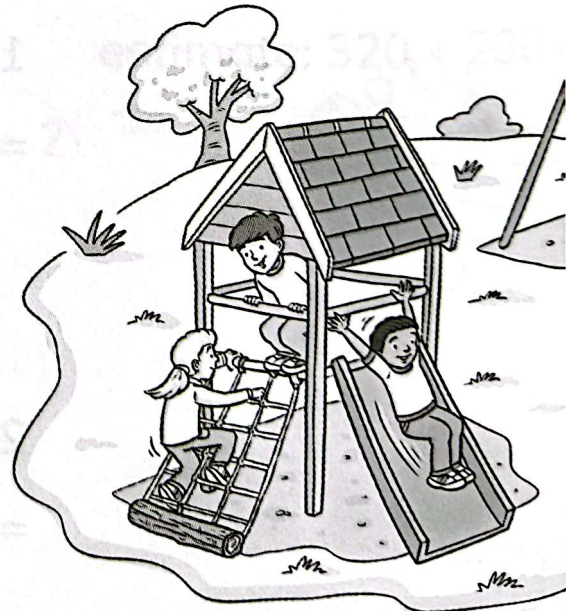
$$\begin{array}{r} \textcircled{1} 148 \\ + 38 \\ \hline 186 \end{array} \quad \begin{array}{r} 150 \\ + 40 \\ \hline 190 \end{array}$$



- 9 359 children and 218 adults
visited the play park today.
How many people visited the
play park today?

Estimate and then calculate.
Show your method.

$$\begin{array}{r} \textcircled{0} 359 \\ + 218 \\ \hline 577 \end{array} \quad \begin{array}{r} 360 \\ + 220 \\ \hline 580 \end{array}$$



> 3.2 Subtraction

Exercise 3.2

Focus

1 Complete each subtraction. Show how you found each answer

$$38 - 5$$

$$= 33$$

$$49 - 7$$

$$= 42$$

$$64 - 7$$

$$= 57$$

$$25 - 8$$

$$= 17$$

2 Complete each subtraction. Show how you found each answer

$$169 - 6$$

$$= 163$$

$$238 - 4$$

$$= 234$$

$$134 - 8$$

$$= 126$$

$$243 - 7$$

$$= 236$$

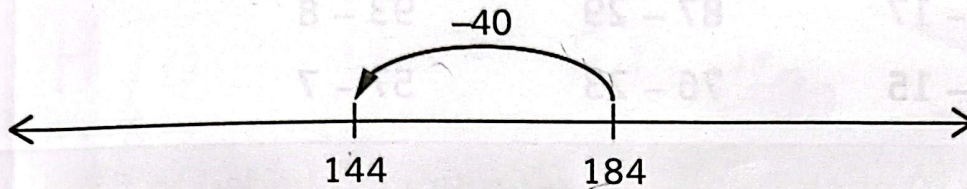
Monday, September 28, 2020

3.2 Subtraction

3 Estimate and then complete each subtraction.

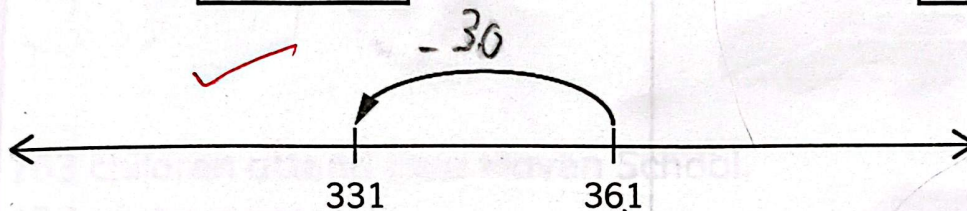
$$184 - 42 = \boxed{142}$$

$$\text{estimate} = 180 - \boxed{40} = \boxed{140}$$



$$361 - 33 = \boxed{328}$$

$$\text{estimate} = 360 - \boxed{30} = \boxed{330}$$



4 Emyr did not have enough time to finish his calculation. Complete them both for him.

$$\text{estimate: } 460 - 250 = \boxed{210}$$

$$\text{estimate: } 370 - 220 = \boxed{150}$$

No regrouping needed.

Regroup 373 into $300 + 60 + 13$.

$$458 = 400 + 50 + 8$$

$$373 = 300 + \boxed{\overset{60}{\cancel{70}}} + \boxed{\overset{10}{\cancel{20}} + 3}$$

$$- 246 = \underline{200 + 40 + 6}$$

$$- 217 = \underline{200 + 10 + 7}$$

$$212 = \underline{200 + 10 + 2} =$$

$$156 = \underline{100 + 50 + 6} =$$

Practice



5 Sort these subtractions into the table.

x

$47 - 3$

$72 - 17$

$87 - 29$

$93 - 8$

$54 - 5$

$61 - 15$

$76 - 23$

$57 - 7$

Change a ten for 10 ones to find the answer	No regrouping needed to the answer

6 The shop has 268 metres of rope. Minh buys 5 metres.
How much rope does the shop have now?

263

✓ The next day, Loki buys 8 metres of rope.
How much rope is left in the shop now?

255

7 763 children attend Blue Haven School. 38 children
are away today. How many children are in school today?

Estimate and then find the answer. Show your method.

$$\begin{array}{r} \text{H T O} \\ 7 \overset{5}{\cancel{6}} 3 \\ - 38 \\ \hline 725 \end{array}$$

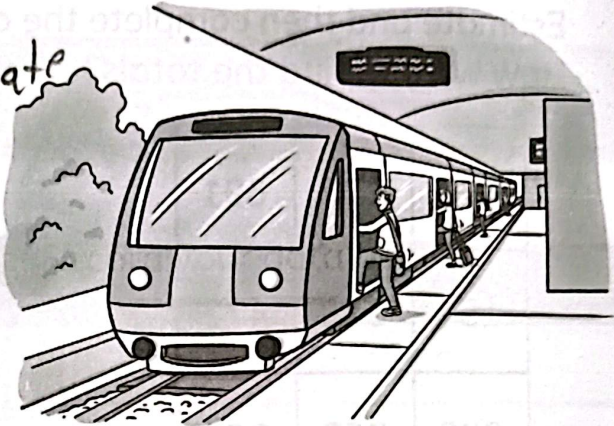
$$\begin{array}{r} \text{H T O} \quad \text{Estimate :} \\ 760 \\ - 40 \\ \hline 720 \end{array}$$



There are 362 people on the train. At the first station, 47 people get off and no one gets on. How many people are on the train now?

Estimate and then find the answer. Show your method.

H T O	H T O	Estimate
$\begin{array}{r} 362 \\ - 47 \\ \hline 315 \end{array}$	$\begin{array}{r} 360 \\ - 50 \\ \hline 310 \end{array}$	



763 children attend Blue Haven School.

427 of them are girls.

How many boys are there?

Estimate and then calculate.

Show your method.

H T O	
$\begin{array}{r} 763 \\ - 427 \\ \hline \end{array}$	$\begin{array}{r} 760 \\ - 430 \\ \hline \end{array}$



- 10/ Estimate and then use an empty number line to help you find the difference between 426 and 483.

> 3.3 Money

Exercise 3.3

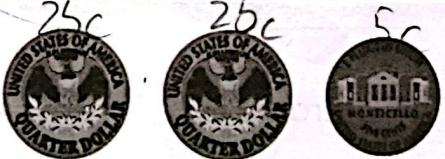
Focus

buy change decimal point spend

1 Write the missing amounts.

Using dollars and cents	Using a decimal point
\$3 and 25c	\$3.25
\$6 and 74c	\$6.74
\$12 and 18c	\$12.18
\$9 and 50c	\$9.50
\$14 and 95c	\$14.95
\$1 and 62c	\$1.62

2 Use a decimal point to write each amount of money in dollars and cents.

\$10.55

1 Dollar = 100c
 half = 50c
 quarter = 25c
 Dime = 10c

3 Addition, subtraction and money

Three rows of money are shown, each with a handwritten total below it.

Row 1: Three \$2 bills and five coins (three 10c coins and two 1c coins). Total: $\$6.32$

Row 2: Two \$1 bills and three coins (one 10c coin and two 5c coins). Total: $\$2.25$

Row 3: Three coins (one 50c coin, one 25c coin, and three 1c coins). Total: $\$0.78$

3 Adi has 50c. He buys a pencil and a sharpener.

Illustrations of school supplies with their prices:

- Eraser 26c
- Sharpener 30c
- Highlighter 37c
- Pencil 18c
- Pen 65c
- Thick felt pen 45c

How much does he spend? $18 + 30 = 48c$

How much change will he have? $50c - 48c = 2c$

- 4 Two bunches of flowers cost \$10.
How much does one bunch of flowers cost?

Write your number sentence and solve it to find the cost of a bunch of flowers.

You could use a flower or an empty box to represent the unknown values in your number sentence.



$$\underline{\$5 + 5 = \$10}$$



Practice

- 5 Write the missing amounts.

Using dollars and cents	Using a decimal point
\$11 and 9c	\$11.09
\$65 and 0c	\$65
\$0 and 4c	\$0.04
\$4 and 01c	\$4.01
\$0 and 75c	\$0.75
\$0 and 99c	\$0.99



3 Addition, subtraction and money

- 6 I spent \$7 and 25c on a cinema ticket and 70c on some popcorn. How much did I spend? How much change will I get from \$10?



$$\begin{array}{r}
 \text{CT} = \$7 \text{ and } 25\text{c} \\
 \text{P} = 70\text{c} \\
 \hline
 \$7 \text{ and } 95\text{c}
 \end{array}
 \qquad
 \begin{array}{r}
 \$10 \text{ and } 00\text{c} \\
 - \$7 \text{ and } 95\text{c} \\
 \hline
 \$2 \text{ and } 05\text{c}
 \end{array}$$

I will get \$2 and 5c.

30/sep

Worked example

Two bags of apples cost \$7.

How much does one bag of apples cost?

Write your number sentence and solve it to find the cost of one bag of apples.

Use a picture to represent the unknown value.

$$\text{Bag} + \text{Bag} = \$7$$

$$6 \div 2 = 3 \text{ and } 3 + 3 = 6$$

$$\text{Half of } \$1 = 50\text{c}$$



I need to find half of \$

I know half of \$6 is \$3

Half of \$1 is 50c.

> 3.3 Money

Exercise 3.3

Focus

buy change decimal point spend

- 1 Write the missing amounts.

Using dollars and cents	Using a decimal point
\$3 and 25c	\$ 3.25
\$6 and 74c	\$6.74
\$12 and 18c	\$12.18
\$9 and 50c	\$9.50
\$14 and 95c	\$14.95
\$1 and 62c	\$1.62

- 2 Use a decimal point to write each amount of money in dollars and cents.

25c 25c 10c



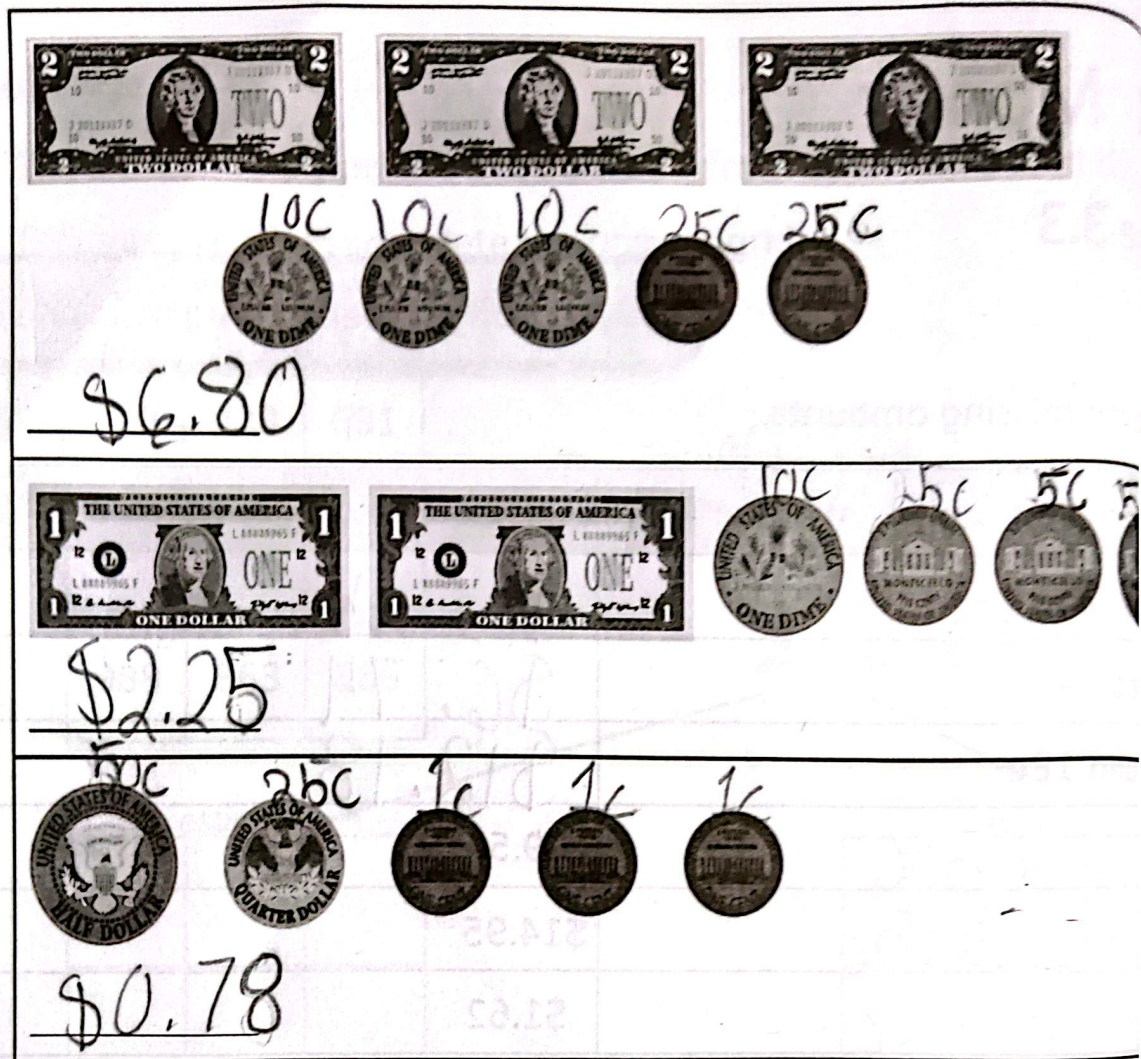
\$10.60

100 cents = 1\$

50 cents = Half \$

25 cents = Quarter \$

10 cents = 1 dime



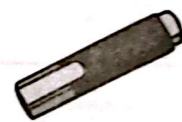
3 Adi has ~~50c~~. He buys a pencil and a sharpener.



Eraser 26c



Sharpener 30c



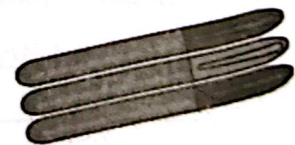
Highlighter 37c



Pencil 18c



Pen 65c



Thick felt pen 45c

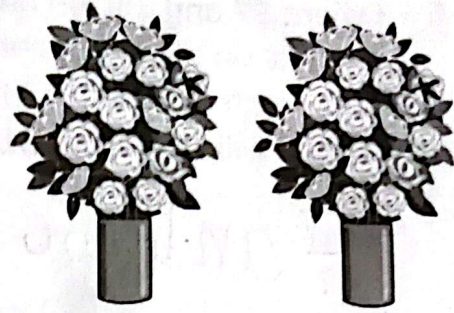
How much does he spend? 48c

How much change will he have? 2c

- 4 Two bunches of flowers cost \$10.
How much does one bunch of flowers cost?

Write your number sentence and solve it to find the cost of a bunch of flowers.

You could use a flower or an empty box to represent the unknown values in your number sentence.



$$\begin{aligned} \$5 + \$5 &= \$10 \\ 1 \text{ bunch cost } \$5 \end{aligned}$$

Practice

- 5 Write the missing amounts.

Using dollars and cents	Using a decimal point
\$11 and 9c	\$ 11.9
\$65 and 0c	\$65
\$0 and 4c	\$0.4
\$4 and 1c	\$4.01
\$0 and 75c	\$0.75
\$0 and 99c	\$0.99

- 6 I spent \$7 and 25c on a cinema ticket and 70c on some popcorn. How much did I spend? How much change will I get from \$10?



$$\begin{array}{r}
 \$7 \text{ and } 25\text{c} \\
 + \quad \quad 70\text{c} \\
 \hline
 \text{spend} = \$7 \text{ and } 95\text{c}
 \end{array}$$

$$\begin{array}{r}
 \$10 \text{ and } 00\text{c} \\
 - \$7 \quad \quad 95\text{c} \\
 \hline
 \$2 \text{ and } 05\text{c}
 \end{array}$$

Worked example

Two bags of apples cost \$7.

How much does one bag of apples cost?

Write your number sentence and solve it to find the cost of one bag of apples.

Use a picture to represent the unknown value.

$$\text{Bag} + \text{Bag} = \$7$$

$$6 \div 2 = 3 \text{ and } 3 + 3 = 6$$

$$\text{Half of } \$1 = 50\text{c}$$

$$\text{Bag} = \$3 + 50\text{c} = \$3 \text{ and } 50\text{c}$$

So one bag of apples costs \$3 and 50c.

I need to find half of \$7.

I know half of \$6 is \$3.

Half of \$1 is 50c.

Half of \$7 is \$3 and 50c.