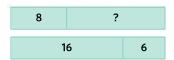
Year 7 Mathematics

Chapter 1 Test: Whole numbers

MULTIPLE CHOICE (15 marks)

Question 1

What is the missing value in the bar model?



A. 8

B. 12

C. 14

D. 18

Question 2

Sophie has \$720 in her bank account. She decides to get a haircut, which costs \$140. What is the balance in Sophie's bank account after paying for her haircut?

A. \$580

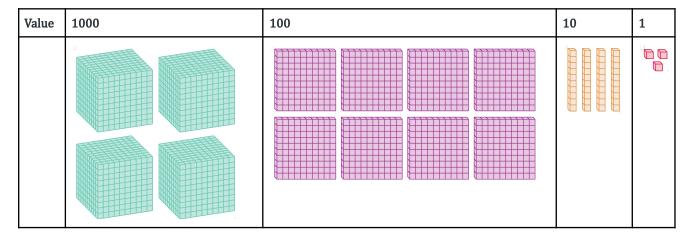
B. \$660

C. \$680

D. \$860

Question 3

Determine the number shown in the place value chart.



A. 4843

B. 4943

- **C.** 40 843
- **D.** 48 043

Question 4

Evaluate 54 000 ÷ 1000.

- **A.** 54 000 000
- **B.** 54 000
- **C.** 540

D. 54

Question 5

Evaluate the following expression using the order of operations.

 $(22 + 4 \times 11) \div 11 + (7 - 7)$

A. 4

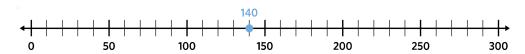
B. 6

C. 19

D. 26

Question 6

Use the number line to round 140 to the nearest 100.



A. 100

B. 140

C. 150

D. 200

Question 7

Evaluate 36×18 using the vertical algorithm.

A. 288

B. 404

C. 648

D. 728

Question 8

Make the following number sentence equivalent by completing the missing operation.

 $28 \mid 14 = 350 \div 50$

A. +

B. -

 $\mathbf{C}. \times$

 $\mathbf{D}. \div$

Question 9

Larry had 135 followers on TikTok. After posting a viral video, Larry's total number of followers was 9 times larger. How many followers did Larry have after posting the viral TikTok?

A. 1215

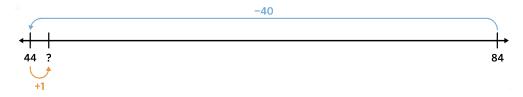
B. 1350

C. 1485

D. 2565

Question 10

Use the numberline and the compensation strategy to evaluate 84 - 39.



A. 40

B. 44

C. 45

D. 54

Question 11

The populations of all the North American countries are shown in the table below.

Country	Population	
Canada	38 012 482	
Mexico	129 205 458	
United States	329 509 310	

Use lead digit rounding to estimate the total number of people that live in North America.

- **A.** 440 000 000
- **B.** 450 000 000
- **C.** 500 000 000
- **D.** 540 000 000

Question 12

What is the value of the highlighted digit?

- 1 <mark>4</mark>82 563
- **A.** 4

B. 400

- **C.** 400 000
- **D.** 4 000 000

Question 13

In Australian rules football a goal is worth 6 points and a behind is worth 1 point. The Fremantle Dockers scored 11 goals and 13 behinds in their preseason game. How many points did they score?

A. 73

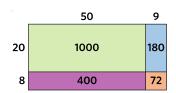
B. 79

C. 89

D. 91

Question 14

Use the open array to determine the value of 59×28 .



A. 1252

B. 1472

C. 1580

D. 1652

Question 15

Evaluate the following using short division.

8)341

A. 35 *r* 1

B. 42 *r* 5

C. 42 r 6

D. 43 *r* 5



SHORT ANSWER (35 marks)

Question 16

$$(1+1+2+2=6 \text{ marks})$$

Use the vertical algorithm to complete each addition or subtraction calculation.

- **a.** 75 + 23
- **b.** 168 43
- **C.** 1532 + 508 + 71

d. 9626 – 6308

Question 17

(1 + 1 + 2 + 2 marks = 6 marks)

Evaluate each expression.

- **a.** $3 \times [(6+8) \div 2]$
- **b.** $10 + [4 \times (8 7) \times 12] 8$
- **C.** $15 \times 4 + \{80 \div [24 \div (3 \times 2)]\}$

d. $6^2 + 32 \times [(8 \div 2) \div (5^2 - 23)]$

Question 18

(1+1+3+3=8 marks)

List the values in the described order.

- **a.** Ascending: 1684, 8614, 4681
- **b.** Descending: 21 466, 26 461, 21 646
- **C.** Ascending: 1 654 662, 1 546 662, 1 654 266, 1 645 266
- **d.** Descending: 8 421 365, 8 214 365, 8 421 635, 8 413 563

Question 19

(2 marks)

There are 7 different colours of Smarties (blue, brown, green, orange, purple, red, and yellow) and exactly 112 Smarties in a packet. How many purple Smarties are there in a packet if there are an equal number of each colour?

Question 20

(3 marks)

Jacko and Scotty competed to see who could walk further over a 3 week period. Jacko walked 12 km in week one, 9 km in week two, and 18 km in week three. Scotty walked 16 km in week one and 13 km in week two. How far would Scotty have had to walk in week three if the competition ended in a draw?

Question 21

(3 marks)

Bill is planning his birthday party. He buys 11 party boxes of chips. In each party pack there are 20 small packets of chips that each weigh 19 grams. Use lead digit rounding to estimate the total weight of the chips Bill bought.

Question 22

(3 marks)

Nick Daicos averaged 22 kicks and 14 handballs when playing for the Oakleigh Chargers in 2021. Unfortunately the season was cut short and Nick was only able to play 5 games. How many kicks and how many handballs did Nick have in the 2021 season?



Question 23

(4 marks)

Touk owns a business selling lego sets. It costs him \$33 to buy a lego set from a warehouse and he sells each one for \$79. Touk sold 125 lego sets last year and sold 4 times more this year. How much profit did Touk make this year?

Note: profit = selling price - cost price

EXTENDED RESPONSE (20 marks)

Question 24

(1+2+2+1+2=8 marks)

Four friends, Buzz, Jasper, Joel and Barney, all play the soccer video game FIFA. The number of hours they spend playing each month is shown in the following table.

Name	Buzz	Jasper	Barney	Joel
Hours spent playing FIFA	45	16	38	52

- **a.** List the friends in ascending order of the number of hours they spend playing FIFA each month.
- **b.** Use lead digit rounding to estimate how many hours of FIFA that the friends play each month combined.
- **C.** Calculate the exact number of hours of FIFA that the friends play each month combined.

- **d.** What is the difference between the estimated number of hours and the actual number of hours?
- **e.** A fifth friend, Jake, also plays FIFA. How many hours does Jake play per month if Buzz and Barney play the same amount combined as Jasper, Joel and Jake?





Question 25

(2+3+2+3+2=12 marks)

Bailey earns \$22 an hour working at Melbourne Charcoal Chicken. During a university semester he can work 15 hours per week and when it is holidays he can work 24 hours per week.

- **a.** How much can Bailey earn in one week during a university semester?
- **b.** How much more money per week can Bailey earn during the holidays compared to during a university semester?

- **C.** Bailey earned \$418 one week. How many hours did he work?
- **d.** Bailey's friend Juliet offers him a different job over the holidays where he could earn \$27 an hour. How much more money could Bailey earn each week by working with Juliet during the holidays instead of working at Melbourne Charcoal Chicken?

e. Bailey decides to work 10 hours per week at Melbourne Charcoal Chicken and 14 hours with Juliet. How much money could he earn in a week?

Answers

MULTIPLE CHOICE

Question 1

C

Question 2

Α

Question 3

Α

Question 4

D

Question 5

В

Question 6

Α

Question 7

C

Question 8

D

Question 9

Α



Question 10

 C

Question 11

Α

Question 12

C

Question 13

В

Question 14

D

Question 15

В

SHORT ANSWER

Question 16

a. 98

b. 125

c. 2111

d. 3318

Question 17

a. 21

b. 50

C. 80

d. 100

Question 18

e. \$598

- **a.** 1684, 4681, 8614
- **b.** 26 461, 21 646, 21 466
- **C.** 1 546 662, 1 645 266, 1 654 266, 1 654 662
- **d.** 8 421 635, 8 421 365, 8 413 563, 8 214 365

Question 19

There are 16 purple Smarties in a packet.

Question 20

Scotty would have had to walk 10 km.

Question 21

Bill bought approximately 4000 grams of chips.

Question 22

Nick Daicos had $110\ \text{kicks}$ and $70\ \text{handballs}$ in the $2021\ \text{season}$.

Question 23

Touk made a profit of \$23 000.

EXTENDED RESPONSE

Question 24

- a. Jasper, Barney, Buzz, Joel
- **b.** 160 hours
- **c.** 151 hours
- **d.** 9 hours
- **e.** 15 hours

Question 25

- **a.** \$380
- **b.** \$198
- **C.** 19 hours

