Chapter 1 Number skills

All Multiple Choice

1 What is 1232 × 3?
- A 1232
- B 2230
- C 2464
- D 3696

2 What is 18 + 4 × (10 − 3)?
- A 18
- B 28
- C 32
- D 46

3 What is the highest common factor of 20 and 40?
- A 2
- B 4
- C 10
- D 20

4 What are the factors of 12?
- A 1, 2, 3, 4, 6, 12
- B 1, 2, 4, 12, 24, 36
- C 1, 2, 4, 8, 12, 24
- D 1, 2, 3, 4, 5, 6

5 What is the lowest common multiple of 11 and 22?
- A 11
- B 20
- C 22
- D 44

6 What is the square root of 81?
- A 5
- B 6
- C 7
- D 9

7 What is twelve squared equivalent to?
- A 12
- B 36
- C 64
- D 144

8 What are the first 4 multiples of 7?
- A 7, 14, 21, 28
- B 1, 7, 8, 9
- C 7, 21, 35, 42
- D 1, 2, 3, 4

9 What is the approximate answer to 4203 ÷ 23?
- A 150
- B 170
- C 183
- D 200

10 What is the approximate answer to 83243 × 188?
- A 8 000 000
- B 15 808 000
- C 16 000 000
- D 15 649 684

11 What does $\dfrac{4}{11} + \dfrac{2}{11}$ equal?
- A $\dfrac{6}{11}$
- B $\dfrac{6}{22}$
- C $\dfrac{8}{11}$
- D $\dfrac{8}{22}$

12 What does the division, $6\frac{1}{5} \div \frac{7}{10}$ equal?

A $\quad 4\frac{17}{50}$

B $\quad 8\frac{6}{7}$

C $\quad 6\frac{7}{50}$

D $\quad 6\frac{10}{35}$

13 The conversion of $4\frac{2}{3}$ to a decimal correct to 2 decimal places is:

A   0.66
B   4.33
C   4.66
D   4.67

14 The conversion of 0.8 to a fraction is:

A $\quad \dfrac{8}{100}$

B $\quad \dfrac{8}{1000}$

C $\quad \dfrac{4}{50}$

D $\quad \dfrac{4}{5}$

15 The answer to $5.73 - 0.08$ is:

A   4.93
B   5.65
C   5.71
D   6.32

16 Evaluate 78.34×2.1. The answer is:

A   80.44
B   156.44
C   164.514
D   1645.14

17 The answer to
$\frac{2}{3}$ of $300 \div (32 \div 8) + 9 - 2$ is:

A   24
B   50
C   57
D   59

18 Which of these is a true number sentence?

A $\quad 50 - 4 \times (6 + 2) - 7 = 11$
B $\quad (50 - 4) \times 6 + 2 - 7 = 11$
C $\quad 50 - (4 \times 6) + 2 - 7 = 11$
D $\quad 50 - 4 \times 6 + (2 - 7) = 11$

19 Ken went to the fruit market and bought:
   3kg of apples at $1.80 per kg
   800g of peas at $2.90 per kg
   1.5kg of oranges at $0.89 per kg

The total cost of the items are:
A $3.75
B $4.87
C $5.89
D $9.06

20 Kate eats $\frac{2}{7}$ of her apple now and $\frac{1}{7}$ of the apple after dinner. What fraction is left over?

A $\quad \dfrac{1}{7}$

B $\quad \dfrac{2}{7}$

C $\quad \dfrac{3}{7}$

D $\quad \dfrac{4}{7}$

21 Ken wants to share his 24 toys between his 3 friends. Each friend will receive:
A 3 toys
B 8 toys
C 10 toys
D 12 toys

22 Jon and Kate eat $\dfrac{3}{8}$ of a chocolate cake.

They decide to share the remainder with their mum and dad. What fraction will each parent get?

A $\dfrac{10}{8}$

B $\dfrac{10}{16}$

C $\dfrac{5}{16}$

D $\dfrac{8}{10}$

23 Peter sold 0.82 of his cap collection. What fraction is this?

A $\dfrac{82}{100}$

B $\dfrac{8}{100}$

C $\dfrac{82}{10}$

D $\dfrac{8.2}{100}$

24 In the previous question, Peter had 50 caps to begin with. How many caps does he still have?
A 6
B 7
C 8
D 9

25 I am an improper fraction.
My numerator is a multiple of 11.
My denominator is a prime number.
The sum of the numerator and the denominator is 29.
What fraction am I?

A $\dfrac{11}{18}$

B $\dfrac{22}{7}$

C $\dfrac{18}{11}$

D $\dfrac{22}{11}$

26 The number 1 is:
A a prime number
B a composite number
C a multiple of 6
D a factor of 13

27 The number 14 is:
A a prime number
B a composite number
C a multiple of 28
D a factor of 2

28 What is $16^2 - 8^2$?
A 192
B 64
C 16
D 8

29 Which of the following is a proper fraction?

A $\dfrac{5}{3}$

B $\dfrac{3}{5}$

C $\dfrac{13}{5}$

D 7.42

30 Find $\frac{3}{4}$ of $\frac{1}{2}$ of 6.

A 9

B 4

C $2\frac{1}{4}$

D $7\frac{1}{9}$

31 Sam ate $\frac{2}{5}$ of his pizza for lunch and $\frac{2}{3}$ of the remainder for afternoon tea. What fraction of the original pizza was left over?

A $\frac{1}{3}$

B $\frac{1}{5}$

C $\frac{2}{5}$

D 0

Number skills

Name: _____

Non-calculator questions

1 Find an approximate answer to the following.
272 + 3072 + 36 + 82 371

2 The weather forecast predicted that over the
next 11 months it would rain 17 mm per month.
Approximately how much rain might fall?

3 Jane eats $\frac{3}{8}$ of her pizza for lunch and $\frac{2}{8}$ for
dinner. What amount is left over?

A $\frac{2}{8}$

B $\frac{3}{8}$

C $\frac{4}{8}$

D $\frac{5}{8}$

4 Is the following statement true or false?
$$\frac{12}{10} - \frac{3}{5} + \frac{2}{15} = \frac{11}{15}$$

5 What might be the missing digits?

$$\frac{\Box}{12} + \frac{4}{12} = \frac{\Box}{12}$$

6	Use 3 of the following fractions to make a true number sentence. $\dfrac{2}{5}, \dfrac{3}{4}, \dfrac{7}{20}, \dfrac{23}{20}$

7	Evaluate $3\dfrac{2}{3} \div \dfrac{5}{9}$.

8	What mixed numeral, when multiplied by $2\dfrac{2}{5}$, gives a result of $3\dfrac{9}{25}$?

9	If $\dfrac{3}{5}$ is subtracted from a number to give a result of $\dfrac{2}{3}$, what is the number?

10	Two identical fractions add to give $\dfrac{1}{3}$. What might the 2 fractions be?

Number skills

Name: _____

Non-calculator questions

1   What are the missing numbers?

$$
\begin{array}{r}
4\,\square \\
+\ \underline{2\,5} \\
\square\,3
\end{array}
$$

2   What numbers could be added to 427 to make it divisible by 10?
Give 2 possible solutions.

3   A number is divided by 6 and the remainder is 3. What might the number be?
Give 2 possible solutions.

4   What could the missing numbers be?

$$
\begin{array}{r}
2\,\square\,9 \\
-\ \underline{\square\,5\,\square} \\
1\ \ 3\ \ 5
\end{array}
$$

5   List all the factors of 36.

6   Use order of operations to calculate the following.
$240 \div 4 + 15 - 33$

7   Use order of operations to calculate the following.
$(412 - 352) \div (41 - 32 + 3)$

8   (a)   Write all the factors of 12.

       (b)   Write all the factors of 15.

       (c)   Write all the common factors of 12 and 15.

       (d)   Write the highest common factor of 12 and 15.

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9   From the list of numbers

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13:

       (a)   write all the multiples of 2

       (b)   write all the multiples of 3

       (c)   write the common multiples of 2 and 3

       (d)   write the lowest common multiple of 2 and 3.

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10   Evaluate the following.

$$\sqrt{36} + 0.7^2 - \frac{1}{2} \times \sqrt{4}$$

All Multiple Choice

28/31

Name: _____

1 What is 1232×3?
A. 1232
B 2230
C 2464
D 3696 ✓

2 What is $18 + 4 \times (10 - 3)$?
A 18
B 28
C 32
D 46 ✓

3 What is the highest common factor of 20 and 40?
A 2
B 4
C 10
D 20 ✓

4 What are the factors of 12?
A 1, 2, 3, 4, 6, 12 ✓
B 1, 2, 4, 12, 24, 36
C 1, 2, 4, 8, 12, 24
D 1, 2, 3, 4, 5, 6

5 What is the lowest common multiple of 11 and 22?
A 11
B 20
C 22 ✓
D 44

6 What is the square root of 81?
A 5
B 6
C 7
D 9 ✓

7 What is twelve squared equivalent to?
A 12
B 36
C 64
D 144 ✓

8 What are the first 4 multiples of 7?
A 7, 14, 21, 28 ✓
B 1, 7, 8, 9
C 7, 21, 35, 42
D 1, 2, 3, 4

9 What is the approximate answer $4203 \div 23$?
A 150
B 170
C 183 ✓
D 200

10 What is the approximate answer to 83243×188?
A 8 000 000
B 15 808 000
C 16 000 000 ✓
D 15 649 684 Exact

11 What does $\dfrac{4}{11} + \dfrac{2}{11}$ equal?
A $\dfrac{6}{11}$ ✓
B $\dfrac{6}{22}$
C $\dfrac{8}{11}$
D $\dfrac{8}{22}$

$\dfrac{10}{11}$

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B $8\dfrac{6}{7}$ ✓
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B 4.33 ✓
C 4.66
D 4.67

14 The conversion of 0.8 to a fraction is:
A $\dfrac{8}{100}$
B $\dfrac{8}{1000}$
C $\dfrac{4}{50}$
D $\dfrac{4}{5}$ ✓

15 The answer to $5.73 - 0.08$ is:
A 4.93
B 5.65 ✓
C 5.71
D 6.32

16 Evaluate 78.34×2.1. The answer is:
A 80.44
B 156.44
C 164.514 ✓
D 1645.14

17 The answer to $\dfrac{2}{3}$ of $300 + (32 \div 8) + 9 - 2$ is:
A 24
B 50
C 57 ✓
D 59

18 Which of these is a true number sentence?
A $50 - 4 \times (6+2) - 7 = 11$ ✓
B $(50 - 4) \times 6 + 2 - 7 = 11$
C $50 - (4 \times 8) + 2 - 7 = 11$
D $50 - 4 \times 6 + (2 - 7) = 11$

19 Ken went to the fruit market and bought:
3kg of apples at $1.80 per kg
800g of peas at $2.90 per kg
1.5kg of oranges at $0.89 per kg
The total cost of the items are:
A $3.75
B $4.87
C $5.89
D $9.06 ✓

20 Kate eats $\dfrac{2}{7}$ of her apple now and $\dfrac{1}{7}$ of the apple after dinner. What fraction is left over?
A $\dfrac{1}{7}$
B $\dfrac{2}{7}$
C $\dfrac{3}{7}$
D $\dfrac{4}{7}$ ✓

$\dfrac{8}{9}$

21 Ken wants to share his 24 toys between his 3 friends. Each friend will receive:

A. 3 toys
B. 8 toys ✓
C. 10 toys
D. 12 toys

22 Jon and Kate eat $\frac{3}{8}$ of a chocolate cake. They decide to share the remainder with their mum and dad. What fraction will each parent get?

A. $\frac{10}{8}$
B. $\frac{10}{16}$
C. $\frac{5}{16}$ ✓
D. $\frac{8}{10}$

23 Peter sold 0.82 of his cap collection. What fraction is this?

A. $\frac{82}{100}$ ✓
B. $\frac{8}{100}$
C. $\frac{82}{10}$
D. $\frac{8.2}{100}$

24 In the previous question, Peter had 50 caps to begin with. How many caps does he still have?

A. 6
B. 7
C. 8
D. 9 ✓

25 I am an improper fraction. My numerator is a multiple of 11. My denominator is a prime number. The sum of the numerator and the denominator is 29. What fraction am I?

A. $\frac{11}{18}$
B. $\frac{22}{7}$ ✓
C. $\frac{18}{11}$
D. $\frac{22}{11}$

26 The number 1 is:

A. a prime number
B. a composite number
C. a multiple of 6
D. a factor of 13 ✓

27 The number 14 is:

A. a prime number
B. a composite number ✓
C. a multiple of 28
D. a factor of 2

28 What is $16^2 - 8^2$? 64

A. 192 ✓
B. 64
C. 16
D. 8

29 Which of the following is a proper fraction?

A. $\frac{5}{3}$
B. $\frac{3}{5}$ ✓
C. $\frac{13}{5}$
D. 7.42

30 Find $\frac{3}{4}$ of $\frac{1}{2}$ of 6.

A. 9
B. $2\frac{1}{4}$
C. ✓
D. $7\frac{1}{9}$

½

31 Sam ate $\frac{2}{5}$ of his pizza for lunch and $\frac{2}{3}$ of the remainder for afternoon tea. What fraction of the original pizza was left over?

A. $\frac{1}{3}$
B. $\frac{1}{5}$
C. $\frac{2}{5}$
D. 0

$\frac{3}{5} \times \frac{2}{3} = \frac{6}{15} = \frac{2}{5}$

$1 - \frac{2}{5} - \frac{2}{5} = \frac{1}{5}$

Number skills

Non-calculator questions

Name: _____

8/10

1 Find an approximate answer to the following.

$272 + 3072 + 36 + 82371$

86751

$\begin{array}{r} 2\overset{1}{7}2+ \\ 30\overset{1}{7}2+ \\ 36+ \\ 8237\overset{1}{1}+ \\ \hline 85751 \end{array}$ ✓

2 The weather forecast predicted that over the next 11 months it would rain 17 mm per month. Approximately how much rain might fall?

$187\ mm$ ✓

$\begin{array}{r} 17\times \\ 11 \\ \hline 17 \\ 3+ \\ \hline 18 \end{array}$

3 Jane eats $\frac{3}{8}$ of her pizza for lunch and $\frac{2}{8}$ for dinner. What amount is left over?

A $\frac{2}{8}$

Ⓑ $\frac{3}{8}$ ✓

C $\frac{4}{8}$

D $\frac{5}{8}$

4 Is the following statement true or false? **False** ✗

$\frac{3\times2}{10} - \frac{3\times8}{5} + \frac{3\times4}{5\times30} = \frac{11}{15}$ True

5 What might be the missing digits?

$\frac{\boxed{3}}{12} + \frac{4}{12} = \frac{\boxed{7}}{12}$ ✓

4/5

6 Use 3 of the following fractions to make a true number sentence.

$\frac{2}{5}, \frac{3}{4}, \frac{7}{20}, \frac{23}{20}$

$\frac{2\times4}{5\times4} + \frac{7}{20} = \frac{8}{20} + \frac{15}{20} = \frac{23}{20}$ ✓

7 Evaluate $3\frac{2}{3} \div \frac{5}{9}$.

$\frac{11}{3} \times \frac{\cancel{9}^{3}}{5} = \frac{33}{5} = 6\frac{3}{5}$ ✓

8 What mixed numeral, when multiplied by $2\frac{2}{5}$, gives a result of $3\frac{9}{25}$?

$1\frac{2}{5}$

$3\frac{9}{25} = \frac{75+9}{25} = \frac{84}{25}$

$= 3\frac{51}{108}$

$\frac{75}{9} \times \frac{5}{12} = \frac{375}{108} = 3\frac{17}{36}$

correct method, try again

$\frac{3\times5-}{324} \quad \frac{108\times}{3}$

$\frac{51}{9)324}$

$\frac{375}{108}$

9 If $\frac{3}{5}$ is subtracted from a number to give a result of $\frac{2}{3}$, what is the number?

$\frac{9}{15} + \frac{10}{15} = \frac{19}{15} = 1\frac{4}{15}$ ✓

$\frac{4}{15}$

10 Two identical fractions add to give $\frac{1}{3}$. What might the 2 fractions be?

$\frac{1}{6}$ ✓

$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$

4/5

Number skills

Non-calculator questions

Name: _____

1 What are the missing numbers?

$\begin{array}{r} 4\overset{1}{8} \\ +\ 2\,5 \\ \hline 7\,3 \end{array}$ $\cdot 8\,\checkmark\checkmark$

(circled) $\dfrac{19}{24}$

2 What numbers could be added to 427 to make it divisible by 10?
Give 2 possible solutions. $3, 13\ \checkmark\checkmark$

3 A number is divided by 6 and the remainder is 3. What might the number be?
Give 2 possible solutions. $39, 15\ \checkmark\checkmark$

4 What could the missing numbers be?
$\begin{array}{r} 2\,\overset{8}{\cancel{8}}9 \\ -\ \boxed{1}\,5\,4\ \checkmark \\ \hline 1\,3\,5 \end{array}$ $8, 1, 4$

5 List all the factors of 36.
$1, 2, 3, 4, 9, 12, 18, 36\,\checkmark\checkmark$

6 Use order of operations to calculate the following.
$\underset{60}{\left(\overset{\text{'}}{240} \div 4 + 15 - 33\right)}$ $\begin{array}{r}\overset{12}{75}-\\33\\\hline 42\end{array}\checkmark$ $42\,\checkmark$

7 Use order of operations to calculate the following.
$(412 - 352) \div (41 - 32 + 3)$ $\underset{60}{\overset{\overset{'}{12\cancel{6}}}{}} \to 5$

$\begin{array}{r} 3\,4|2 - \quad 35 \\ 3\,5\,2 \\ \hline 0\,6\,0 \end{array}$

(circled) $\dfrac{12}{14}$

8
(a) Write all the factors of 12: $1, 2, 3, 4, 6, 12\,\checkmark$
(b) Write all the factors of 15. $1, 3, 5, 15\,\checkmark$ $|5$
(c) Write all the common factors of 12 and 15. $\overset{5}{\cancel{60}}, 1, 3$
(d) Write the highest common factor of 12 and 15. $3\,\checkmark$

$\begin{array}{r} 3\,\overline{)12}\,,15 \\ 4\quad 5 \end{array}$

$\begin{array}{r}5\\3\,\overline{)15}\end{array}$ 30

9 From the list of numbers
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13;
(a) write all the multiples of 2. $2, 4, 6, 8, 10, 12\,\checkmark$
(b) write all the multiples of 3 $3, 6, 9, 12\,\checkmark$
(c) write the common multiples of 2 and 3 $6, 12\,\checkmark$
(d) write the lowest common multiple of 2 and 3. $6\,\checkmark$

10 Evaluate the following.
$\dfrac{6}{\sqrt{36}} + 0.7^2 - \dfrac{1}{2}\times\sqrt{7}$

$\underset{6}{\cancel{49}}\ \underset{2}{\cancel{}}$ $1.98 \times$ $\overset{'}{0}.49$

$6.49 - 1\ =\ 5.49$ $\dfrac{1}{\cancel{9}}8$ $\underset{2}{0.49}$ 1.98

(circled) $\dfrac{7}{10}$