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1 1-minute Revision

Common Error

$795 \div 26 = ?$

$$\begin{array}{r} 3 \\ 26 \overline{) 795} \\ \underline{78} \\ 15 \end{array}$$

$$\begin{array}{r} 30 \\ 26 \overline{) 795} \\ \underline{78} \\ 15 \end{array}$$

When the remainder is smaller than the divisor, no need to further divide. But '0' should be part of the **units place of the quotient**.

2 Basic Practice

Do the divisions.

1.
$$\begin{array}{r} 15 \overline{) 135} \end{array}$$

2.
$$\begin{array}{r} 41 \overline{) 820} \end{array}$$

3.
$$\begin{array}{r} 32 \overline{) 974} \end{array}$$

4. $235 \div 46 = \square$

5. $548 \div 18 = \square$

6. $869 \div 28 = \square$

7. $483 \div 23 \div 7 = \square$

Complete the questions.

8. A florist has 189 roses which are packed into bunches of 21. The florist can pack _____ bunches at most.
9. After Mum had made 520 g of jam, she divided the jam into 13 bottles. Each bottle of jam contained _____ g.

10.

Class	Drawing	Ballet	Quick calculation
Lesson fee	\$672	\$735	\$580
Number of lessons	12	15	10

Alice plans to enroll in the class with the cheapest average lesson fee. She should enroll in the (drawing / ballet / quick calculation) class. The lesson fee is \$ _____ on average. (Circle the answer)



Date

Time used

minutes

Marks

Solve the problems. (Show your working)

11. The teacher of a dessert making class prepared 743 g of butter. It takes 27 g of butter to make an apple pie. How many apple pies can be made at most?

12. Miss Ho ordered 3 dozen fruit tarts. She paid \$828 for the fruit tarts. How much does each fruit tart cost on average?

3**Advanced Practice****Complete the questions.**

13. The sushi restaurant made 453 pieces of sushi. They were divided into 26 boxes equally. The rest of the sushi was put into the first box. There were _____ pieces of sushi in the first box.

Useful Tips

After dividing the sushi equally, how many pieces of sushi are left?



14. There are 998 clips. If each bottle can carry 34 clips at most, at least _____ bottles are needed to carry all the clips.



15. It takes 48 bulbs to make a set of Christmas lights.

- a. Mr Lin has 879 bulbs. He can make _____ sets of Christmas lights at most.
- b. He needs at least _____ more bulbs to make one more set of Christmas lights.



16. A promotion is held in a department store.

- a. Mrs Lee spent \$950 in the department store. She can get _____ stamps.
- b. Mrs Lee can exchange for _____ cups. She has _____ stamps left.

Promotion of a department store

A stamp is given to every purchase of \$25.

A cup can be exchanged for every 16 stamps.



Assessment 1

Time allowed: **30 min**

Name: _____ Class: _____ () Date: _____

Assessment points		Questions	Marks
Multiplication	A 2-digit number multiplied by a 2-digit number, a 3-digit number multiplied by a 2-digit number, smart multiplication	1 – 8	/ 42
Quadrilaterals	The relations between rhombuses and quadrilaterals	9 – 13	/ 22
Division	A 2-digit number divided by a 2-digit number, a 3-digit number divided by a 2-digit number, problems involving multiplication and division, divisibility	14 – 21	/ 36
Total marks:			/ 100

- Instructions**
- **Multiple choice questions:** Blacken the next to the correct answer.
 - **Questions in which you are asked to 'show your working':**
Write your mathematical expressions, answers, and statements / conclusions.
 - **Other types of questions:** Answer as required in the spaces provided.

1. Do the calculations.

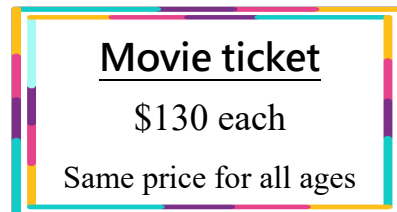
- a. $43 \times 63 =$ _____
- b. $85 \times 709 =$ _____
- c. $125 \times 39 \times 8 =$ _____

2. If $\star \times 250 = 500 \times 20$, then $\star = ?$

- A. 4 B. 10
- C. 40 D. 100

3. There are 28 rows in a cinema.
There are 20 seats in each row.

a. There are _____ seats
from the 8th to 21st rows in total.



b. If the cinema is full, the cinema can get \$ _____.

4. Each kilogram of cabbage costs \$16. A fast food restaurant purchased 23 kg of cabbages. The restaurant owner should pay \$ _____.



Marks

3M

3M

3M

3M

3M

3M

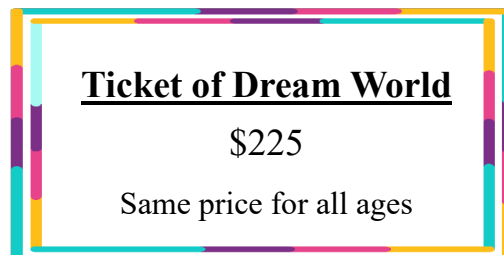
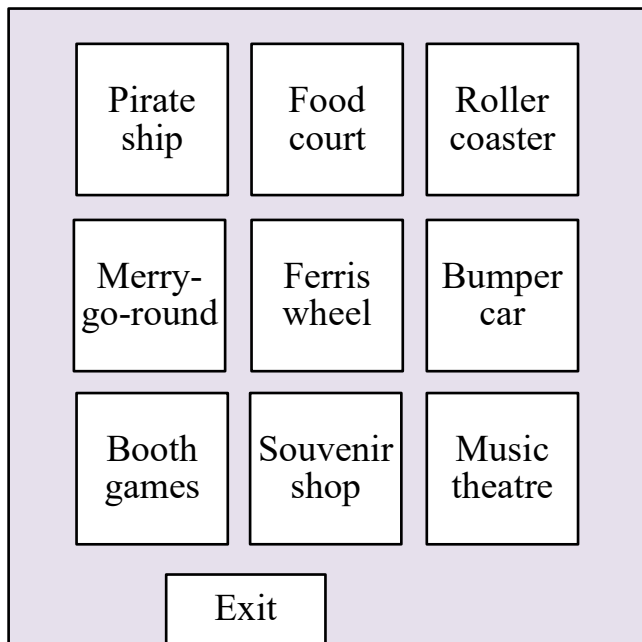
3M

3M

Cross-topic Exercise

Complete the questions below.

1. The map of Dream World and the ticket information are shown below.



- a. Kenny and 12 friends go to Dream World to play. They should pay \$_____ for the tickets in total.
- b. The pirate ship is to the north-east of the music theatre. Kenny goes _____ from the exit to reach the food court. Then he goes _____ to reach the roller coaster.
- c. In the souvenir shop, each music box costs \$98. Kenny has \$500. How many music boxes can he buy at most? (Show your working)

2. A rectangular handicraft paper is shown on the right.

- a. Rectangles have all the properties of (squares / rhombuses / parallelograms). (Circle the answer)



- b. If this rectangular handicraft paper is divided into identical squares, the side length of each square is _____ cm at most.
- c. If a few pieces of this rectangular handicraft paper are fitted together to make a square, the side length of the square is at least _____ cm.

Unit 1: Multiplication (Exercises 1-3)

1. A 2-digit number multiplied by a 2-digit number

First calculate 23×80

$$\begin{array}{r} 23 \\ \times 85 \\ \hline 1840 \end{array}$$

Then calculate 23×5

$$\begin{array}{r} 23 \\ \times 85 \\ \hline 1840 \\ 115 \end{array}$$

Add the result to together

$$\begin{array}{r} 23 \\ \times 85 \\ \hline 1840 \\ 115 \\ \hline 1955 \end{array}$$

2. A 3-digit number multiplied by a 2-digit number

First calculate 241×30

$$\begin{array}{r} 241 \\ \times 36 \\ \hline 7230 \end{array}$$

Then calculate 241×6

$$\begin{array}{r} 241 \\ \times 36 \\ \hline 7230 \\ 1446 \end{array}$$

Add the result to together

$$\begin{array}{r} 241 \\ \times 36 \\ \hline 7230 \\ 1446 \\ \hline 8676 \end{array}$$

3. Smart multiplication

- Sometimes change the order of the numbers or decompose one of the numbers into 2 numbers before calculation.

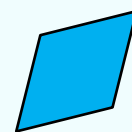
e.g. $25 \times 19 \times 4$
 $= 25 \times 4 \times 19$
 $= 100 \times 19$
 $= 1900$

e.g. 32×50
 $= 16 \times 2 \times 50$
 $= 16 \times 100$
 $= 1600$

Unit 2: Quadrilaterals(Exercises 4-5)

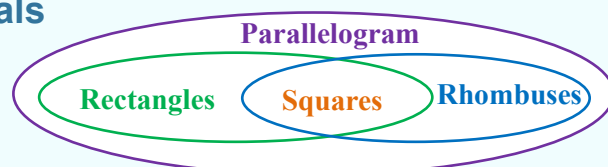
1. Properties of rhombuses

- 4 equal sides
- 2 pairs of parallel opposite sides



2. The relations between quadrilaterals

- Squares are also rectangles.
- Squares are also rhombuses.
- Squares, rectangles and rhombuses are also parallelograms



7 Division (2)

1.

$$\begin{array}{r} 9 \\ 15 \overline{) 135} \\ \underline{135} \\ 0 \end{array}$$

2.

$$\begin{array}{r} 20 \\ 41 \overline{) 820} \\ \underline{820} \\ 0 \end{array}$$

3.

$$\begin{array}{r} 30 \\ 32 \overline{) 974} \\ \underline{96} \\ 14 \end{array}$$

4. $5 \dots 5$

5. $30 \dots 8$

6. $31 \dots 1$

7. 3

8. 9
[$189 \div 21 = 9$]

9. 40
[$520 \div 13 = 40$]

10. ballet, 49
[Drawing class: $672 \div 12 = 56$
Ballet class: $735 \div 15 = 49$
Quick calculation class: $580 \div 10 = 58$]

Common mistake: Quick calculation class, $580 \times$

- Mistakenly think that if the tuition of full term is the cheapest, the average lesson fee is the cheapest.

11. $743 \div 27$
 $= 27 \dots 14$
 27 apple pies can be made at most.

12. $828 \div 36$
 $= 23$
 Each fruit tart costs \$23 on average.
 [3 dozen means 36 fruit tarts.]
 (Accept any reasonable answers)

13. 28

[$453 \div 26 = 17 \dots 11$, $17 + 11 = 28$]

Common mistake: $11 \times$

- Did not add the original number of the first box of sushi.

14. 30
[$998 \div 34 = 29 \dots 12$. At least 30 more bottles are needed.]

15. a. 18
[$879 \div 48 = 18 \dots 15$]

b. 33
[$48 - 15 = 33$]

16. a. 38
[$950 \div 25 = 38$]

b. 2, 6
[$38 \div 16 = 2 \dots 6$]

8 Problems involving multiplication and division

1. a. 3
[3 dozen means 36 oranges. $108 \div 36 = 3$]

b. 195
[$13 \times 15 = 195$]

c. 7
[$160 \div 21 = 7 \dots 13$]

2. a. 11500
[$500 \times 23 = 11500$]

b. 25
[$500 \div 20 = 25$]

3. a. 12060
[$18 \times 670 = 12060$]

b. 27
[$670 \div 25 = 26 \dots 20$. At least 27 boxes are needed.]

4. a. 3500
[There are 14 days in 2 weeks.
 $250 \times 14 = 3500$]

b. 33
[$462 \div 14 = 33$]

Common mistake: $6468 \times$

- Misuse to calculate by multiplication.

5. a. 4320 [1 hour = 60 minutes, $72 \times 60 = 4320$]

Common mistake: 1728 ✗

- Confuse 'hour' and 'minute'. Mistakenly think that 1 hour = 24 minutes.

- b. 2 [1 minute = 60 seconds, $120 \div 60 = 2$]

6. 15×239
= 3585
It got \$3585.

7. $730 \div 42$
= 17 ... 16

At least 18 boxes are needed to accommodate all the towels.

8. B

[Buy 6 get 1 free. Buy 12 get 2 free. Therefore, Miss Chan bought 16 accessories, but she only needed to pay for 14 of them. $896 \div 14 = 64$]

MCQ Explanation

Wrong choice	Reason
A	Ignore that there are 2 accessories for free and use ' $896 \div 16$ ' to calculate.
C	Miscalculate in multiplication and miscalculate as: 896×14 .
D	Ignore that there are 2 accessories for free. Miscalculate in multiplication and miscalculate as: 896×16 .

9. C [$14 \times 32 = 448$, $448 + 8 = 456$, $456 \div 9 = 50 \dots 6$]

MCQ Explanation

Wrong choice	Reason
A	Misuse the remainder of packing in boxes of 14 as the answer.
B	When calculating the total number of kiwis, do not add the remainder. Thus, miscalculate the remainder after repacking.
D	Miscalculate in ' $9 - 8$ '.

10. B

[There are 30 days in November. $216 \div 30 = 7 \dots 6$
1 dollar = 100 cents. \$6 is left, that means 600 cents are left. $600 \div 30 = 20$]

MCQ Explanation

Wrong choice	Reason
A	Mistakenly think that the quotient after the calculation is the final answer.
C	Mistakenly think that the quotient and the remainder after the calculation are the final answers.
D	Mistakenly think that adding 1 to the quotient after the calculation is the answer.

9 Divisibility

- 300, 40, 7104
- 300, 285, 567, 7104
- 35, 300, 40, 685, 285
- 300, 40
- 300
- 2, 4, 6, 8, 0
- 2, 5, 8
- D [$989 + 1 = 990$, 990 can be divisible by 5.]

MCQ Explanation

Wrong choice	Reason
A	Ignore to find 'at least' as required.
B	Ignore to find 'at least' as required.
C	Mistakenly think that if 5 can be divided by 5, 5 added to 989 can also be divided by 5.

9. D

MCQ Explanation

Wrong choice	Reason
A	Confuse the 'units place' and the 'tens place'. A number with the digit in the units place being an even number can be divisible by 2.
B	Ignore that if the numbers are divisible by 5, the digits in their units place can be 5, which is not divisible by 10.
C	Do not master the divisibility of 3.

10. 996

Common mistake: 999 ✗

- Ignore to find an 'even number' as required.

11. 399

Common mistake: 402 ✗

- Mistakenly think that the answer must be larger than 400. Ignore 'closest to' is required in the question.

12. 8

[The digit in the units place of the numbers divisible by 10 is 0.
 $82 + 8 = 90$. 90 is divisible by 2, 5 and 10. Thus, at least 8 should be added.]

13. 45, 60

[Between 40 and 65 inclusive, the numbers divisible by 5 are 40, 45, 50, 55, 60 and 65. Of 40, 45, 50, 55, 60 and 65, the numbers divisible by 3 are 45 and 60.]