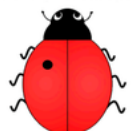


RECALL - X2 (DOUBLING)



Draw the same number of spots on the other side of the ladybird.



Double 1 is



Double 2 is



Double 3 is



Double 4 is



Double 5 is



Double 6 is

$6 + 6 = \underline{\quad}$

$6 \times 2 = \underline{\quad}$

Double 7 is

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times 2 = \underline{\quad}$

Double 8 is

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times 2 = \underline{\quad}$

Double 9 is

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times 2 = \underline{\quad}$

Double 10 is

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times 2 = \underline{\quad}$



Double 11 is

Double 13 is

Double 15 is

Double 21 is

Double 24 is

Double 32 is

Double 43 is

Double 50 is

If you double any 1, 2 or 3 digit number, the answer is always even.

True or false?
Investigate.



RECALL – ANSWERS



Draw the same number of spots on the other side of the ladybird.



Double 1 is



Double 2 is



Double 3 is



Double 4 is



Double 5 is



Double 6 is

$$6 + 6 = 12$$

$$6 \times 2 = 12$$

Double 7 is

$$7 + 7 = 14$$

$$7 \times 2 = 14$$

Double 8 is

$$8 + 8 = 16$$

$$8 \times 2 = 16$$

Double 9 is

$$9 + 9 = 18$$

$$9 \times 2 = 18$$

Double 10 is

$$10 + 10 = 20$$

$$10 \times 2 = 20$$



Double 11 is

Double 13 is

Double 15 is

Double 21 is

Double 24 is

Double 32 is

Double 43 is

Double 50 is

If you double any 1, 2 or 3 digit number, the answer is always even.

True or false?
Investigate.



**LO: I CAN MULTIPLY A 2 DIGIT
NUMBER BY A 1 DIGIT NUMBER.**

Page

MODELLED EXAMPLE

Sam sells bunches of 10 flowers for £4.
He sells single flowers for 50p.



Three customers buy two bunches and 3 single flowers each.

$$10 + 10 + 3 = 23 \text{ flowers each.}$$

How many did they buy altogether?
 $3 \times 23 = \square$

Act out the problems with equipment.
Draw them pictorially.



Working it out - dienes

Each person has 23 flowers.

Three stick figures representing customers. Each figure has two vertical bars of yellow blocks (representing bunches of 10) and three green blocks (representing single flowers) below them. This visualizes that each person has 23 flowers.

Bar model

A bar model. At the top is a large blue bar. Below it are three smaller white bars. Each white bar contains two rows of dots: the top row has two yellow dots and the bottom row has three green dots. Below each white bar is the number 23.

Times tables

$$3 \times 20 = 60$$
$$3 \times 3 = 9$$

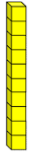
Add the totals.

INTELLIGENT PRACTICE

Multiply the **Tens** then the **Units**. Add the totals together.



Use dienes or counters to help you.



$$2 \times 12 = \square$$

$$2 \times 10 =$$

$$2 \times 2 =$$

$$2 \times 14 = \square$$

$$2 \times 10 =$$

$$2 \times 4 =$$

$$2 \times 23 = \square$$

$$2 \times 20 =$$

$$2 \times 3 =$$



$$3 \times 11 = \square$$

$$3 \times 10 =$$

$$3 \times 1 =$$

$$3 \times 13 = \square$$

$$3 \times 10 =$$

$$3 \times 3 =$$

$$3 \times 22 = \square$$

$$3 \times 20 =$$

$$3 \times 2 =$$

$$3 \times 33 = \square$$

$$3 \times 30 =$$

$$3 \times 3 =$$



$$2 \times 112 = \square$$

$$2 \times 100 =$$

$$2 \times 10 =$$

$$2 \times 2 =$$

$$3 \times 223 = \square$$

$$3 \times 200 =$$

$$3 \times 20 =$$

$$3 \times 3 =$$

$$4 \times 2211 = \square$$

$$4 \times 2000 =$$

$$4 \times 200 =$$

$$4 \times 10 =$$

$$4 \times 1 =$$

Explain the process.
How did you work
out calculations in
chilli 1, 2 and 3.



ANSWERS



Use dienes or counters to help you.



$$\begin{aligned}2 \times 12 &= 24 \\2 \times 10 &= 20 \\2 \times 2 &= 4\end{aligned}$$

$$\begin{aligned}2 \times 14 &= 28 \\2 \times 10 &= 20 \\2 \times 4 &= 8\end{aligned}$$

$$\begin{aligned}2 \times 23 &= 46 \\2 \times 20 &= 40 \\2 \times 3 &= 6\end{aligned}$$



$$\begin{aligned}3 \times 11 &= 33 \\3 \times 10 &= 30 \\3 \times 1 &= 3\end{aligned}$$

$$\begin{aligned}3 \times 13 &= 39 \\3 \times 10 &= 30 \\3 \times 3 &= 9\end{aligned}$$

$$\begin{aligned}3 \times 22 &= 66 \\3 \times 20 &= 60 \\3 \times 2 &= 6\end{aligned}$$

$$\begin{aligned}3 \times 33 &= 99 \\3 \times 30 &= 90 \\3 \times 3 &= 9\end{aligned}$$



$$\begin{aligned}2 \times 112 &= 224 \\2 \times 100 &= 200 \\2 \times 10 &= 20 \\2 \times 2 &= 4\end{aligned}$$

$$\begin{aligned}3 \times 223 &= 669 \\3 \times 200 &= 600 \\3 \times 20 &= 60 \\3 \times 3 &= 9\end{aligned}$$

$$\begin{aligned}4 \times 2211 &= 8844 \\4 \times 2000 &= 8000 \\4 \times 200 &= 800 \\4 \times 10 &= 40 \\4 \times 1 &= 4\end{aligned}$$

Explain the process.
How did you work
out calculations in
chilli 1, 2 and 3.



DIVE DEEPER 1

1 Four customers buy **12** flowers each. Finish off drawing the dienes beneath each person.



4 customers x **12** flowers.

$4 \times 10 = \square$

$4 \times 2 = \square$

When I add these two totals, I get .

2 Each pack of Fruit Pastilles have 21 sweets. How many would there be in three packs?



$3 \times 20 = \square$

$3 \times \underline{\quad} = \square$

When I add these two totals, I get .

3 Use the place value grid to work out 43×2 . First, multiply the **Tens**, then the **Units**. Finally, add the two totals.

$2 \times \underline{\quad} = \underline{\quad}$

$2 \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

T	U
●●●●	●●●
●●●●	●●●

Now solve 32×3 using the same process.

$3 \times \underline{\quad} = \underline{\quad}$

$3 \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

T	U
●●●	●●
●●●	●●
●●●	●●

4 Olive can solve these in her head without using equipment.



- $25 \times 2 =$
- $25 \times 3 =$
- $25 \times 4 =$
- $25 \times 5 =$



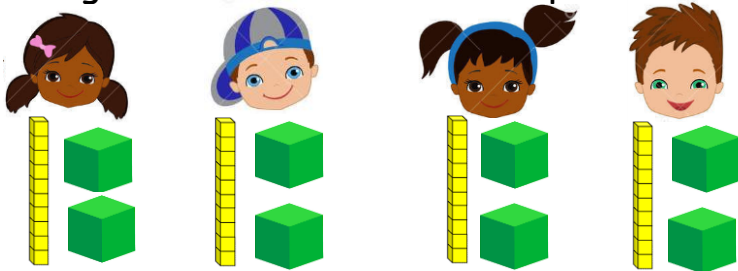
How would you solve these calculations in your head? Write an explanation.

In order to work out , first I would . Then I would . Finally I would .

ANSWERS

1

Four customers buy **12** flowers each. Finish off drawing the dienes beneath each person.



4 customers x **12** flowers.

$$4 \times 10 = \boxed{40}$$

$$4 \times 2 = \boxed{8}$$

When I add these two totals, I get **48**.

2

Each pack of Fruit Pastilles have 21 sweets. How many would there be in three packs?

3 packs x **21** sweets



$$3 \times 20 = \boxed{60}$$

$$3 \times 1 = \boxed{3}$$

When I add these two totals, I get **63**.

3

Use the place value grid to work out 43×2 . First, multiply the **Tens**, then the **Units**. Finally, add the two totals.

$$2 \times 40 = 80$$

$$2 \times 3 = 6$$

$$80 + 6 = 86$$

T	U
●●●●	●●●
●●●●	●●●

Now solve 32×3 using the same process.

$$3 \times 30 = 90$$

$$3 \times 2 = 6$$

$$90 + 6 = 96$$

T	U
●●●	●●
●●●	●●
●●●	●●

4

Olive can solve these in her head without using equipment.



$$25 \times 2 = 50$$

$$25 \times 3 = 75$$

$$25 \times 4 = 100$$

$$25 \times 5 = 125$$



In order to work out 25×3 , first I would **times 20 by 3 = 60**. Then I would **multiply 5 by 3, which is 15**. Finally I would **add these together so 60 + 15 = 75**.

DIVE DEEPER 2

1 Four children go bowling. In total they knock down 48 skittles. If they knocked down an equal amount of skittles, how many skittles is this?



Show all of your workings out.

2 Each loaf of bread has 18 slices. How many slices would there be in three packs?

3 loaves x 18 slices

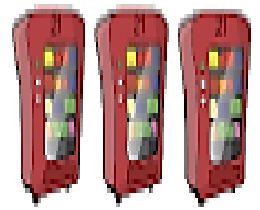
$$3 \times 10 = \text{$$

$$3 \times \text{} = \text{$$

When I add the two totals together, I get

3

There are 21 chocolate bars in a vending machine.



How many chocolate bars will there be in 3 vending machines?

Use this method to solve:
21 x 4 and 33 x 3

7	0

4

5

Using the digit cards in the multiplication below how close can you get to 100?



$$\text{$$

DIVE DEEPER 2

1 Four children go bowling. In total they knock down 48 skittles. If they knocked down an equal amount of skittles, how many skittles did each child knock down?



Show all of your workings out.

2 Each loaf of bread has 18 slices. How many slices would there be in three packs?

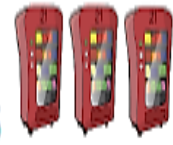
3 loaves x 18 slices

$$3 \times 10 = 30$$

$$3 \times \underline{8} = 24$$

When I add these two totals together, I get

3 There are 21 chocolate bars in a vending machine. How many chocolate bars will there be in 3 vending machines?



7	0

Use this method to solve:
21 x 4 and 33 x 3

$$21 \times 4 = 84$$

$$20 \times 4 = 80$$

$$1 \times 4 = 4$$

$$33 \times 3 = 99$$

$$30 \times 3 = 90$$

$$3 \times 3 = 9$$

4 23 x 4 = 92 this is the closest answer.

24 x 3 = 72

32 x 4 = 128

34 x 2 = 68

Children may also use estimation as part of their reasoning. For example, 23 is near 25 and there are 4 lots of 25 in 100