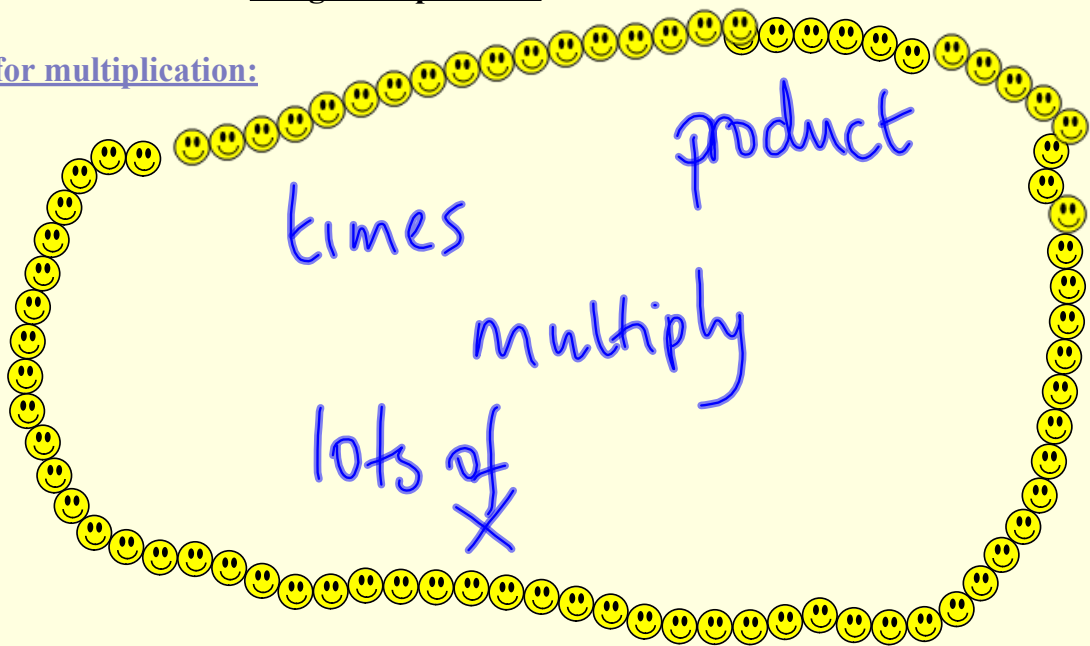


Long Multiplication

Words for multiplication:



Find the product of 4 and 5

Find the answer to 8 times 3.

What is 9 lots of 4?

$$\boxed{2} \times \boxed{4} \boxed{5} = 90$$

257F

x
x
x

2
52
F

$$\boxed{2} \boxed{5} = 100$$

$$\begin{array}{r} 2 \\ 4 \\ 4 \\ 2 \end{array} \begin{array}{r} 5 \\ 4 \\ 4 \\ 2 \end{array} = \begin{array}{r} 100 \\ 120 \\ 108 \\ 210 \end{array}$$

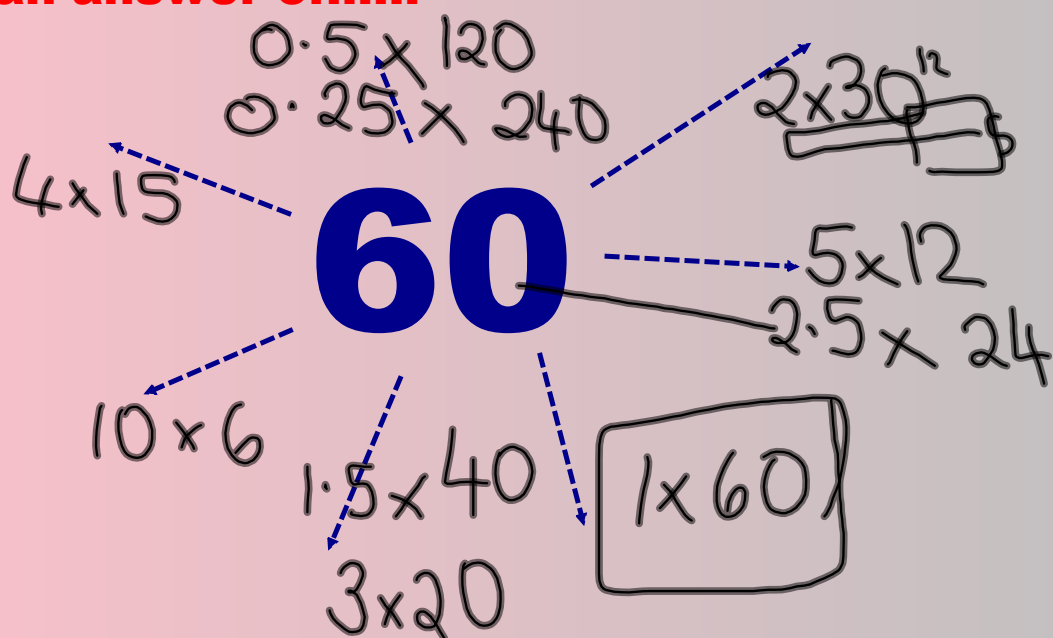
$$\boxed{2} \times \boxed{1} \boxed{5} \begin{array}{l} 30 \\ 105 \\ 5 \times 21 \end{array}$$

Can you make

- 102
- 60
- 25

$$\begin{array}{l} 2 \times 51 = 102 \\ 1 \times 25 = 25 \\ 5 \times 12 = 60 \end{array}$$

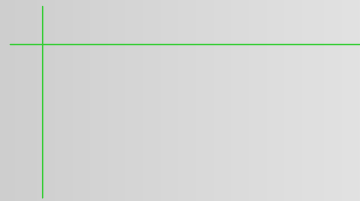
How many multiplication sums do you know with an answer of.....



Multiplying two digit numbers by a single digit.

$$\begin{array}{r} 23 \times 5 = 115 \\ \begin{array}{r} \times 5 \\ \hline 20 100 \\ 3 15 \\ \hline 115 \end{array} \end{array}$$

48×3



1. $45 \times 4 =$

2. $56 \times 3 =$

3. $12 \times 9 =$

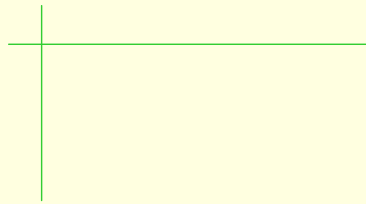
4. $98 \times 3 =$

5. $72 \times 5 =$

Multiplying three digit numbers by a single digit.

$$\begin{array}{r} 123 \times 5 = 615 \\ \begin{array}{r} \times 5 \\ \hline 100 500 \\ 20 100 \\ 3 15 \\ \hline 615 \end{array} \end{array}$$

$$248 \times 3$$



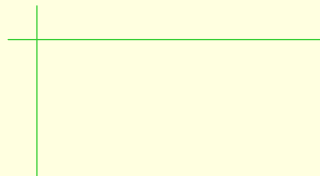
1. $415 \times 4 =$
2. $562 \times 3 =$
3. $172 \times 9 =$
4. $398 \times 3 =$
5. $725 \times 5 =$

Multiplying two digit numbers by a two digit number.

$$13 \times 51 = 663$$

$$\begin{array}{r|l} \times & 50 \quad 1 \\ \hline 10 & 500 \quad 10 \\ 3 & \underline{150} \quad \underline{3} \\ \hline & 650 + 13 = 663 \end{array}$$

$$48 \times 23$$



1. $45 \times 14 =$

2. $56 \times 23 =$

3. $12 \times 94 =$

4. $98 \times 83 =$

5. $72 \times 52 =$

Multiplying two digit numbers by a three digit number.

$$137 \times 51$$

	50	1
100	5000	100
30	1500	30
7	350	7
	6850	137

$\neq 987$

page 29

A1 a) b) h)

	148 x 23
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1. $245 \times 14 =$

2. $516 \times 23 =$

3. $127 \times 94 =$

4. $398 \times 83 =$

5. $729 \times 52 =$

Using decimals in long multiplication

$$2.3 \times 8 = 18.4$$

$$\begin{array}{r|l} \times & 8 \\ \hline 20 & 160 \\ 3 & 24 \\ \hline & 184 \end{array}$$

Using decimals in long multiplication

$$2.3 \times 4.5 = 10.35$$

$$23 \times 45 = 1035$$

x	40	5	
20	800	100	
3	120	15	
	920	115	= 1035

Work out:

1) $3.4 \times 8 = 27.2$

2) $2.1 \times 4.5 = 9.45$

3) $3.21 \times 9.2 = 29.532$

Problems Using Multiplication

1. 56 students each eat 9 sweets. How many do they eat altogether?

504

2. Cheyne buys 13 apples. They cost 25p each. How much does she spend altogether?

£ 3.25

3. Harvey eats 8 biscuits. Each biscuit has 124 calories. How many calories has he eaten?

992

4. A car uses 42 litres of petrol. If each litre costs £1.40 how much does it cost altogether?

£58.80