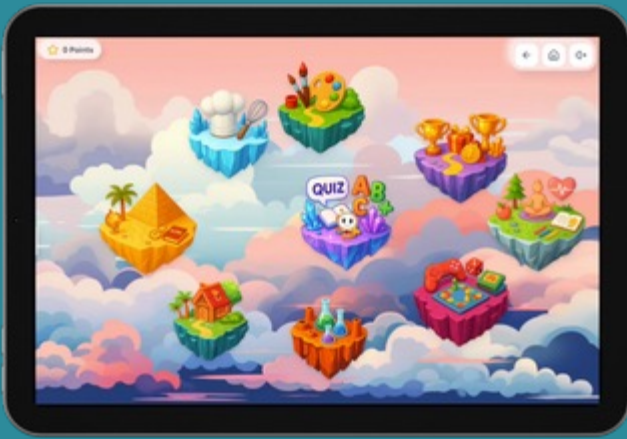


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Year 5 Multiplication

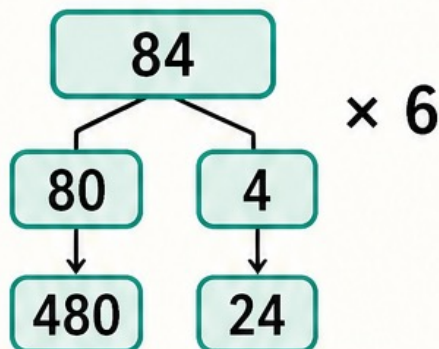
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Choose, Solve and Check	
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Rubric: Year 5 Multiplication Rubric	



Choose a Multiplication Strategy

PARTITION

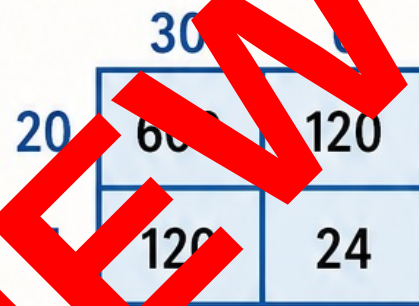
Break a number into place-value parts.



$$84 \times 6 = (80 \times 6) + (4 \times 6) = 504$$

AREA MODEL

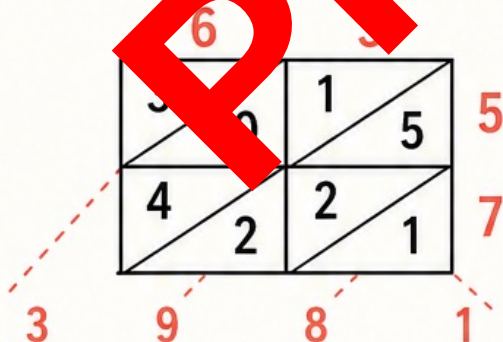
Split both factors and add the partial products.



$$36 \times 24 = 720 + 144 = 864$$

LATTICE

Multiply in the grid, then add along the diagonals.



$$63 \times 57 = 3,591$$

LONG MULTIPLICATION

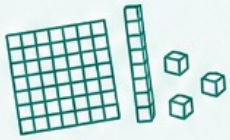
Multiply by each place value, then add the partial products.

$$\begin{array}{r} 243 \\ \times 18 \\ \hline 1944 \quad (243 \times 8) \\ 2430 \quad (243 \times 10) \\ \hline 4374 \end{array}$$

$$243 \times 18 = 4,374$$



Estimate first. Choose a method.
Check that your answer is reasonable.



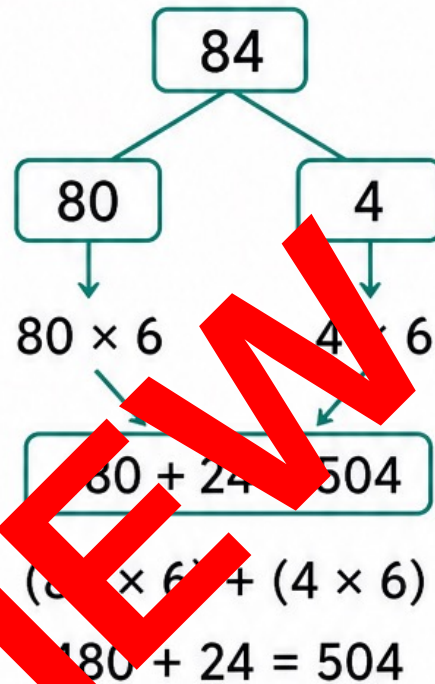
PARTITIONING



1. Split one factor into place-value parts.
2. Multiply each part.
3. Add the partial products.



$$84 \times 6$$



AREA MODEL



1. Split both factors.
2. Multiply inside each rectangle.
3. Add the partial products.



$$36 \times 24$$

	30	6
20	600	120
4	120	24

$$600 + 120 + 120 + 24 = 864$$

- 

6 3

5	3	1
	0	5
7	4	2

3
↓
3

0
↓
5

1
↓
5

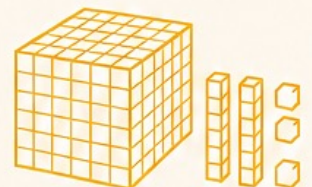
4
↓
5

5 + 2 + 2
↓
9

1
↓
1

- $$1,944 + 2,430 = 4,374$$

$$\begin{array}{r} 243 \\ \times 18 \\ \hline 1,944 \quad (\times 8) \\ 2,430 \quad (\times 10) \\ \hline 4,374 \end{array}$$



MULTIPLICATION STRATEGY SORT

Sort each equation onto a strategy mat. More than one method may work — be ready to justify your choice.

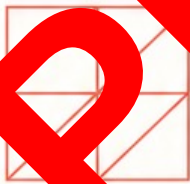
PARTITION



AREA MODEL



LATTICE



LONG MULTIPLICATION

$$\begin{array}{r} 34 \\ \times 26 \\ \hline \end{array}$$

STRATEGY SORT CARDS



84×6

203×4

$1,025 \times 3$

99×7



36×42

75×64

123×23

305×47

58×76

211×39

407×52

692×34

243×18

506×27

$1,204 \times 35$

$2,315 \times 42$

PREVIEW



Choose a method, solve, then explain why it worked.



MULTIPLICATION MISSION



DIRECTIONS

1. Roll and move.
2. Draw a challenge card that matches your space.
3. Solve using that strategy.
4. Explain your thinking to keep the space.



EXACT RULE:
First player to FINISH wins.

MULTIPLICATION MISSION CARDS

PARTITION

$$84 \times 6$$

CHECK: 504

PARTITION

$$203 \times 4$$

CHECK: 812

PARTITION

$$1,025 \times 3$$

CHECK: 3,075

PARTITION

$$99 \times 7$$

CHECK: 693

AREA

$$36 \times 42$$

CHECK: 1,512

AREA

$$75 \times 64$$

CHECK: 4,800

AREA

$$128 \times 23$$

CHECK: 2,944

AREA

$$305 \times 47$$

CHECK: 14,335

LATTICE

$$58 \times 75$$

CHECK: 4,408

LATTICE

$$214 \times 39$$

CHECK: 8,346

LATTICE

$$407 \times 52$$

CHECK: 21,164

LATTICE

$$692 \times 34$$

CHECK: 25,528

LONG

$$243 \times 18$$

CHECK: 4,374

LONG

$$506 \times 27$$

CHECK: 13,662

LONG

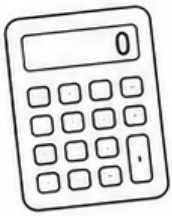
$$1,204 \times 35$$

CHECK: 42,140

LONG

$$2,315 \times 42$$

CHECK: 97,230



TIMES-TABLE FLUENCY CHECK

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

Name: _____ Date: _____

Solve each fact. Work carefully rather than racing.

7×8 _____	12×6 _____	9×4 _____	11×7 _____
6×9 _____	8×12 _____	4×7 _____	3×11 _____
5×8 _____	12×12 _____	7×6 _____	2×3 _____
8×8 _____	11×5 _____	6×2 _____	6×7 _____
9×9 _____	7×12 _____	3×8 _____	10×11 _____
12×4 _____	6×6 _____	8×7 _____	5×9 _____

QUICK ESTIMATES

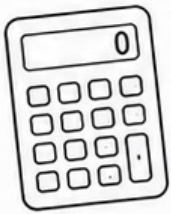
Round to friendly numbers, then estimate.

- A. $198 \times 6 \approx$ _____

- B. $52 \times 39 \approx$ _____

- C. $307 \times 18 \approx$ _____

- D. $1,024 \times 5 \approx$ _____



TIMES-TABLE FLUENCY CHECK

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

ANSWERS: _____ Date: _____

Solve each fact. Work carefully rather than racing.

7×8 <u>56</u>	12×6 <u>72</u>	9×4 <u>36</u>	11×7 <u>77</u>
6×9 <u>54</u>	8×12 <u>96</u>	4×7 <u>28</u>	3×11 <u>33</u>
5×8 <u>40</u>	12×12 <u>144</u>	7×6 <u>42</u>	2×3 <u>27</u>
8×8 <u>64</u>	11×5 <u>55</u>	4×12 <u>48</u>	6×7 <u>42</u>
9×9 <u>81</u>	7×12 <u>84</u>	3×8 <u>24</u>	10×11 <u>110</u>
12×4 <u>48</u>	6×6 <u>36</u>	8×7 <u>56</u>	5×9 <u>45</u>

QUICK ESTIMATES

Round to friendly numbers, then estimate.

A. $198 \times 6 \approx 200 \times 6 = 1,200$

B. $52 \times 39 \approx 50 \times 40 = 2,000$

C. $307 \times 18 \approx 300 \times 20 = 6,000$

D. $1,024 \times 5 \approx 1,000 \times 5 = 5,000$

PARTITION AND MULTIPLY

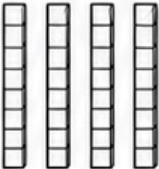
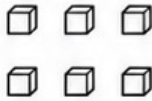
Name: _____

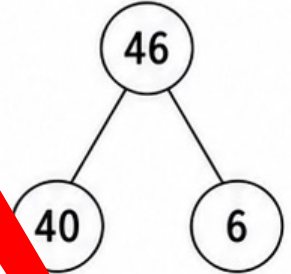
Date: _____

Split the first factor into place-value parts. Multiply each part, then add the partial products. Show every step.

Worked example:

$$\begin{aligned} 46 \times 7 &= (40 \times 7) + (6 \times 7) \\ &= 280 + 42 \\ &= 322 \end{aligned}$$

Tens	Ones
	
40	6



1. 73×4

2. 68×7

3. 125×6

4. 304×8

5. 917×5

6. 246×9

7. $1,205 \times 3$

8. $2,034 \times 4$

Which problem was easiest to partition? Why?

PARTITION AND MULTIPLY

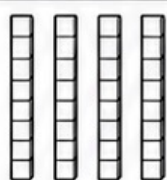
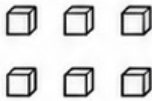
ANSWERS: _____

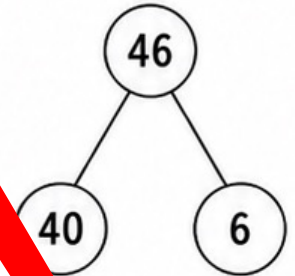
Date: _____

Split the first factor into place-value parts. Multiply each part, then add the partial products. Show every step.

Worked example:

$$\begin{aligned} 46 \times 7 &= (40 \times 7) + (6 \times 7) \\ &= 280 + 42 \\ &= 322 \end{aligned}$$

Tens	Ones
	
40	6



1. 73×4

$$(70 \times 4) + (3 \times 4) = 280 + 12 = 292$$

2. 68×7

$$(60 \times 7) + (8 \times 7) = 420 + 56 = 476$$

3. 125×6

$$\begin{aligned} (100 \times 6) + (20 \times 6) + (5 \times 6) \\ = 600 + 120 + 30 = 750 \end{aligned}$$

4. 304×8

$$\begin{aligned} (300 \times 8) + (4 \times 8) \\ = 2,400 + 32 = 2,432 \end{aligned}$$

5. 917×5

$$\begin{aligned} (900 \times 5) + (10 \times 5) + (7 \times 5) \\ = 4,500 + 50 + 35 = 4,585 \end{aligned}$$

6. 246×9

$$\begin{aligned} (200 \times 9) + (40 \times 9) + (6 \times 9) \\ = 1,800 + 360 + 54 = 2,214 \end{aligned}$$

7. $1,205 \times 3$

$$\begin{aligned} (1,200 \times 3) + (5 \times 3) \\ = 3,600 + 15 = 3,615 \end{aligned}$$

8. $2,034 \times 4$

$$\begin{aligned} (2,000 \times 4) + (30 \times 4) + (4 \times 4) \\ = 8,000 + 120 + 16 = 8,136 \end{aligned}$$

Which problem was easiest to partition? Why?

Suggested: Problem 4 — the zero tens digit makes a short partition.

Name: _____

Date: _____

AREA MODEL MULTIPLICATION

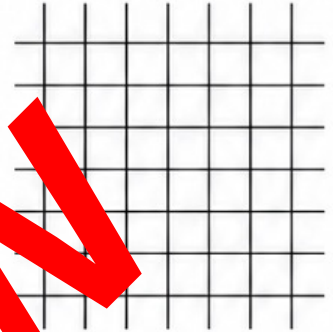
Split both factors by place value. Fill each rectangle with a partial product, then add.

Worked example:

$$34 \times 26 = 884$$

	30	4
20	600	80
6	180	24

$$600 + 80 + 180 + 24 = 884$$



1. 42×35

	40	2
30		
5		

Total: _____

2. 67×24

	60	7
20		
4		

Total: _____

3. 58×73

	50	8
70		
3		

Total: _____

4. 105×46

	100	0	5
40			
6			

Total: _____

5. 236×32

	200	30	6
30			
2			

Total: _____

6. 409×27

	400	0	9
20			
7			

Total: _____

ANSWERS: _____

Date: _____

AREA MODEL MULTIPLICATION

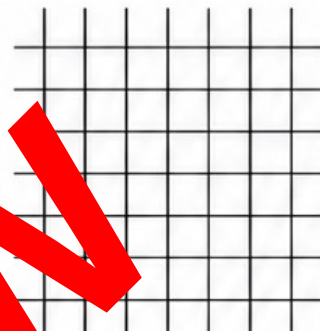
Split both factors by place value. Fill each rectangle with a partial product, then add.

Worked example:

$$34 \times 26 = 884$$

	30	4
20	600	80
6	180	24

$$600 + 80 + 180 + 24 = 884$$



1. 42×35

	40	2
30	1,200	60
5	200	10

Total: 1,470

2. 67×24

	60	7
20	1,200	140
4	240	28

Total: 1,608

3. 58×73

	50	8
70	3,500	560
3	150	24

Total: 4,234

4. 105×46

	100	0	5
40	4,000	0	200
6	600	0	30

Total: 4,830

5. 236×32

	200	30	6
30	6,000	900	180
2	400	60	12

Total: 7,552

6. 409×27

	400	0	9
20	8,000	0	180
7	2,800	0	63

Total: 11,043

LATTICE MULTIPLICATION

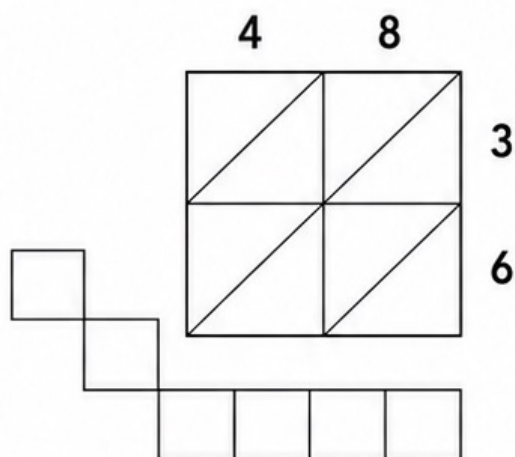
Name: _____

Date: _____

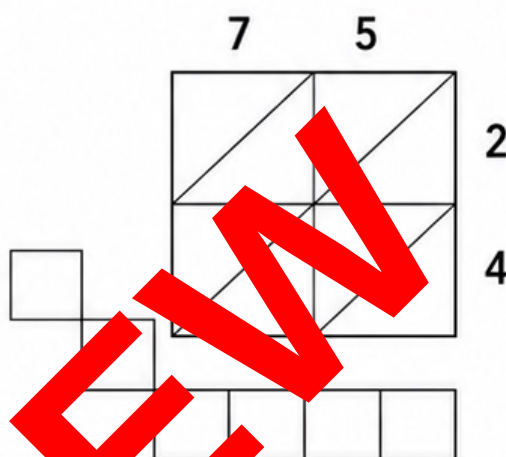
Write the factors around each grid. Multiply into the split cells, then add along the diagonals.

Tens above the diagonal. Ones below.

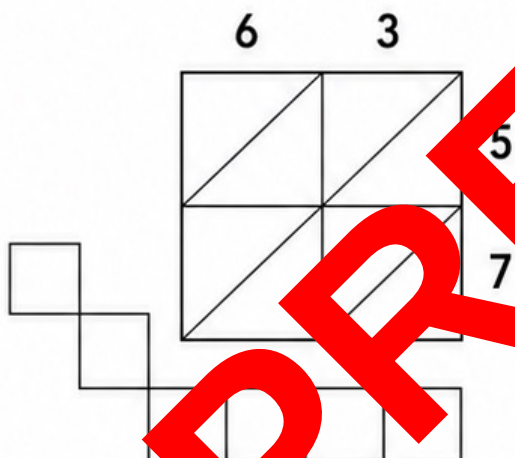
1. 48×36



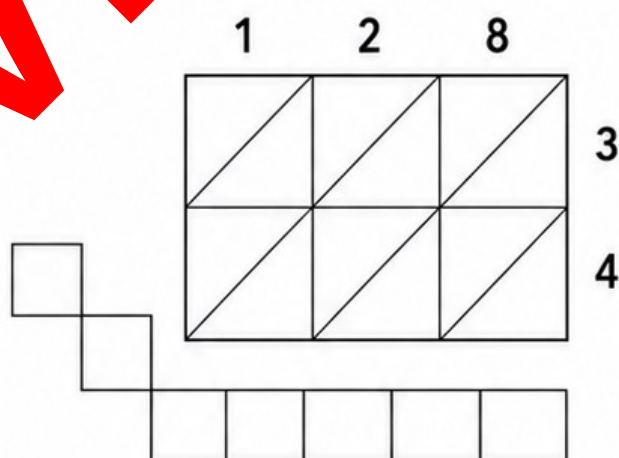
2. 75×24



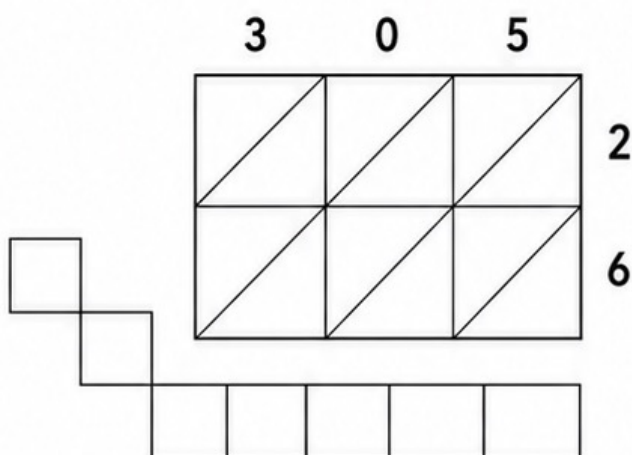
3. 63×57



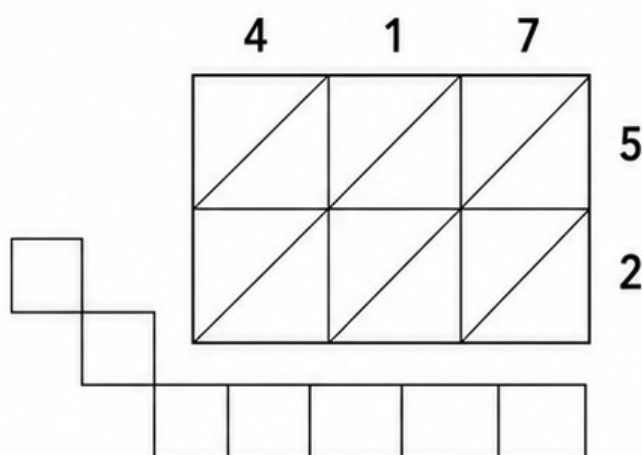
4. 28×34



5. 305×26



6. 417×52



LATTICE MULTIPLICATION

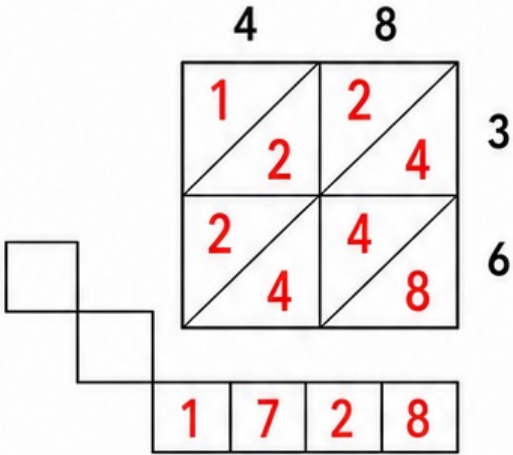
ANSWERS: _____

Date: _____

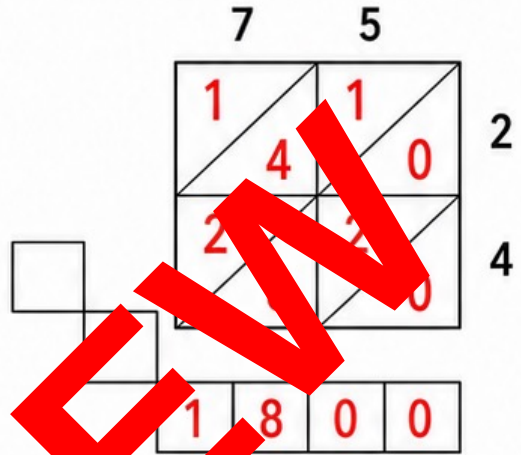
Write the factors around each grid. Multiply into the split cells, then add along the diagonals.

**Tens above the
diagonal. Ones below.**

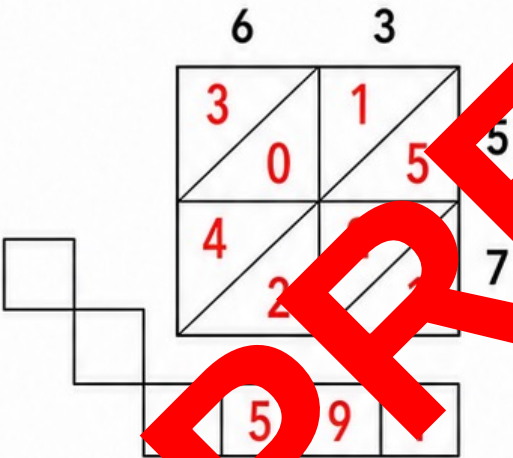
1. 48×36



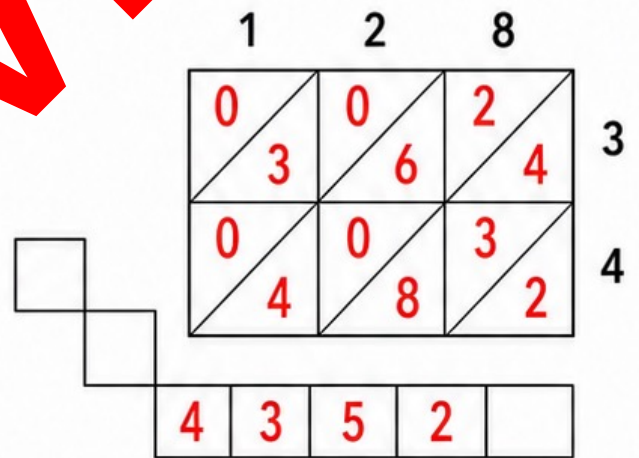
2. 75×24



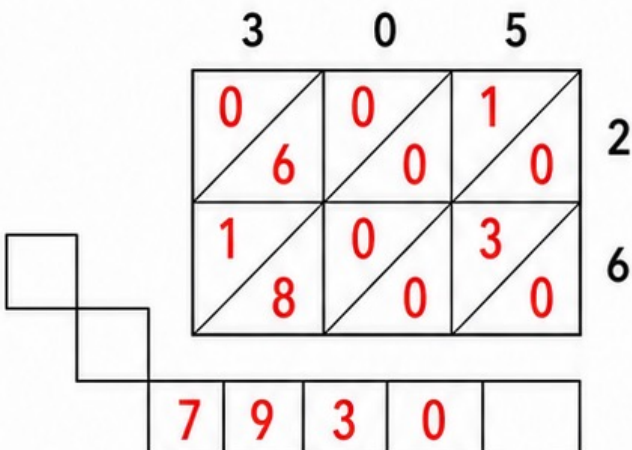
3. 63×57



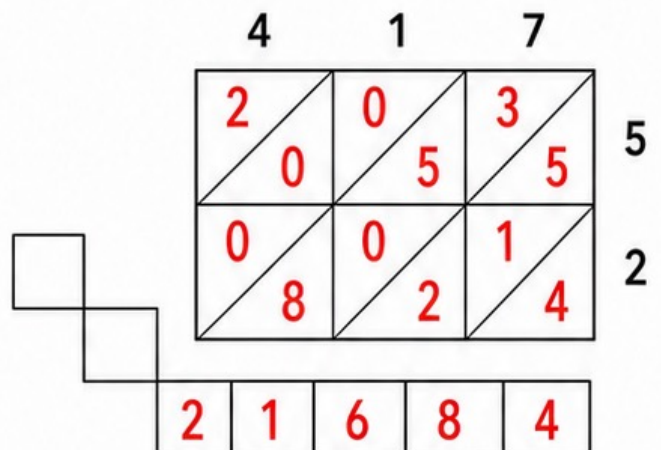
4. ~~28~~ $\times$ 34

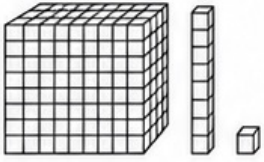


5. 305×26



6. 417×52





LONG MULTIPLICATION



Name: _____

Date: _____

Align digits by place value. Show the partial products and final product.

1.

$$\begin{array}{r} 326 \\ \times 7 \\ \hline \\ \hline \end{array}$$

2.

$$\begin{array}{r} 508 \\ \times 6 \\ \hline \\ \hline \end{array}$$

3.

$$\begin{array}{r} 1,204 \\ \times 5 \\ \hline \\ \hline \end{array}$$

4.

$$\begin{array}{r} 3072 \\ \times 8 \\ \hline \\ \hline \end{array}$$

5.

$$\begin{array}{r} 243 \\ \times 16 \\ \hline \\ \hline + \\ \hline \end{array}$$

6.

$$\begin{array}{r} 506 \\ \times 24 \\ \hline \\ \hline + \\ \hline \end{array}$$

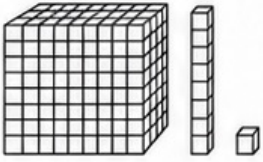
7.

$$\begin{array}{r} 1,305 \\ \times 32 \\ \hline \\ \hline + \\ \hline \end{array}$$

8.

$$\begin{array}{r} 2,408 \\ \times 27 \\ \hline \\ \hline + \\ \hline \end{array}$$

For a tens digit, begin the second partial product in the tens place.



LONG MULTIPLICATION



ANSWERS: _____

Date: _____

Align digits by place value. Show the partial products and final product.

1.

$$\begin{array}{r} 326 \\ \times 7 \\ \hline 2282 \end{array}$$

2.

$$\begin{array}{r} 508 \\ \times 6 \\ \hline 3048 \end{array}$$

3.

$$\begin{array}{r} 1,204 \\ \times 5 \\ \hline 6,020 \end{array}$$

4.

$$\begin{array}{r} 3072 \\ \times 8 \\ \hline 24,576 \end{array}$$

5.

$$\begin{array}{r} 243 \\ \times 100 \\ \hline 24300 \\ + 2430 \\ \hline 24,888 \end{array}$$

6.

$$\begin{array}{r} 506 \\ \times 24 \\ \hline 2,024 \\ 10,120 \\ + 12,144 \\ \hline 24,288 \end{array}$$

7.

$$\begin{array}{r} 1,305 \\ \times 32 \\ \hline 2,610 \\ 39,150 \\ + 41,760 \\ \hline 43,680 \end{array}$$

8.

$$\begin{array}{r} 2,408 \\ \times 27 \\ \hline 16,856 \\ 48,160 \\ + 65,016 \\ \hline 65,016 \end{array}$$

For a tens digit, begin the second partial product in the tens place.

CHOOSE, SOLVE AND CHECK



Name: _____

Date: _____

Choose an efficient method. Estimate first, calculate the exact product, then decide whether your answer is reasonable.

EQUATION	METHOD	ESTIMATE	EXACT PRODUCT	REASONABLE?
1. 47×8				
2. 96×35				
3. 208×14				
4. 65×72				
5. $1,025 \times 6$				
6. 309×27				
7. $2,140 \times 4$				
8. 126×58				

Explain one choice: I used _____ because _____.

CHOOSE, SOLVE AND CHECK



ANSWERS: _____

Date: _____

Choose an efficient method. Estimate first, calculate the exact product, then decide whether your answer is reasonable.

EQUATION	METHOD	ESTIMATE	EXACT PRODUCT	REASONABLE?
1. 47×8	Partition	$50 \times 8 = 400$	376	Yes
2. 96×35	Area	$100 \times 40 = 4,000$	3,360	Yes
3. 208×14	Area	$200 \times 14 = 2,800$	2,912	Yes
4. 65×72	Lattice	$70 \times 70 = 4,900$	4,680	Yes
5. $1,025 \times 6$	Partition	$1,000 \times 6 = 6,000$	6,150	Yes
6. 309×27	Long	$300 \times 30 = 9,000$	8,343	Yes
7. $2,140 \times 4$	Partition	$2,000 \times 4 = 8,000$	8,560	Yes
8. 126×58	Area	$130 \times 60 = 7,800$	7,308	Yes

Explain one choice: I used partitioning for $1,025 \times 6$ because $1,000 \times 6$ and 25×6 are easy to combine.



MULTIPLICATION MARKET DAY

Assessment - Page 1



Name: _____

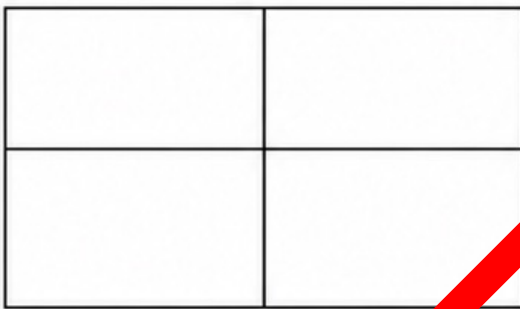
Date: _____

Show your method and check that each answer is reasonable.

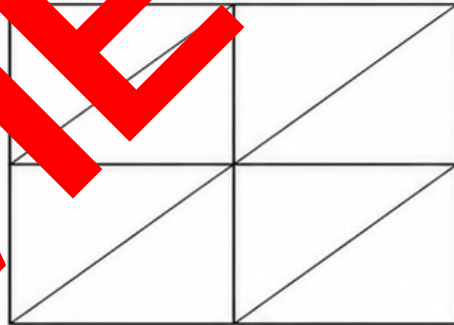
1. Estimate 198×24 using friendly numbers.

2. Use partitioning to solve 306×7 .

3. Use an area model to solve 46×32 .



4. Use partitioning to solve 125×54 .



5. Use long multiplication to solve 508×3 .

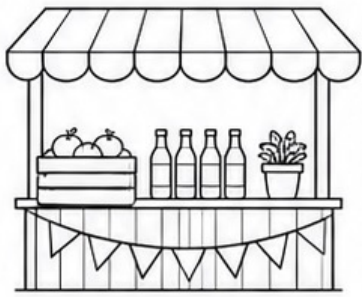
$$\begin{array}{r} 508 \\ \times 3 \\ \hline \end{array}$$

6. Solve 125×48 using an efficient method.
Name your method.

7. Sam says $243 \times 19 = 4,374$. Is Sam correct?
Explain the error.

8. A calculator shows $1,204 \times 27 = 32,508$.
Is this reasonable? Use an estimate to justify.

Teacher score: ____ / 16



MULTIPLICATION MARKET DAY

Assessment - Page 2

Name: _____

Date: _____

Solve each market-day problem. Show your strategy, calculation and check.

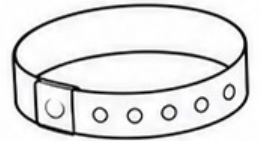
9. A juice stall receives 24 cartons with 36 bottles in each carton.
How many bottles arrive altogether?



10. A sticker stall prepares 125 packs with 48 stickers in each pack.
How many stickers are prepared?



11. The entry desk sorts 308 bundles of 25 wristbands.
How many wristbands are there?



12. A raffle team has 72 rolls with 54 tickets on each roll.
How many tickets are there altogether?



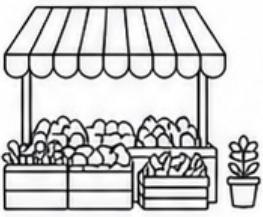
13. Compare two strategies for 205×34 . Show both strategies, give the product, and explain which strategy you prefer.

Strategy 1

Strategy 2

Which strategy do you prefer and why?

Teacher score: ____ / 14



MULTIPLICATION MARKET DAY

Assessment - Page 1



ANSWERS: _____

Date: _____

Show your method and check that each answer is reasonable.

1. Estimate 198×24 using friendly numbers.

$200 \times 20 = 4,000$;
exact product 4,752.

2. Use partitioning to solve 306×7 .

$(300 \times 7) + (6 \times 7)$
 $2,100 + 42 = 2,142$.

3. Use an area model to solve 46×32 .

	40	6
30	1,200	180
2	80	12

Total = 1,472

4. Use partitioning to solve 53×54 .

	50	3
50	2,500	150
3	150	9

Total = 2,709

5. Use long multiplication to solve 108×17 .

$$\begin{array}{r} 108 \\ \times 17 \\ \hline 756 \\ 1080 \\ \hline 1828 \end{array}$$

6. Solve 125×48 using an efficient method.
Name your method.

Area model (or long multiplication):
 $125 \times 48 = 6,000$.

7. Sam says $243 \times 19 = 4,374$. Is Sam correct?
Explain the error.

No. Sam used $\times 18$.
 $243 \times 19 = 243 \times 20 - 243 = 4,617$.

8. A calculator shows $1,204 \times 27 = 32,508$.
Is this reasonable? Use an estimate to justify.

Yes. $1,200 \times 30 = 36,000$,
which is close to 32,508.

Teacher score: ____ / 16



MULTIPLICATION MARKET DAY

Assessment - Page 2

ANSWERS: _____

Date: _____

Solve each market-day problem. Show your strategy, calculation and check.

9. A juice stall receives 24 cartons with 36 bottles in each carton.
How many bottles arrive altogether?

$$24 \times 36 = 864 \text{ bottles.}$$



10. A sticker stall prepares 125 packs with 48 stickers in each pack.
How many stickers are prepared?

$$125 \times 48 = 6,000 \text{ stickers.}$$



11. The entry desk sorts 308 bundles of 25 wristbands.
How many wristbands are there?

$$308 \times 25 = 7,700 \text{ wristbands.}$$



12. A raffle team has 72 rolls of 54 tickets on each roll.
How many tickets are there altogether?

$$72 \times 54 = 3,888 \text{ tickets.}$$



13. Compare two strategies for 205×34 . Show both strategies, give the product, and explain which strategy you prefer.

Strategy 1

$$\begin{aligned} &(200 \times 34) + (5 \times 34) \\ &= 6,800 + 170 = 6,970. \end{aligned}$$

Strategy 2

$$\begin{aligned} &(205 \times 30) + (205 \times 4) \\ &= 6,150 + 820 = 6,970. \end{aligned}$$

Which strategy do you prefer and why?

Suggested: I prefer Strategy 1 because splitting 205 into 200 and 5 makes both partial products easy.

Teacher score: ____ / 14

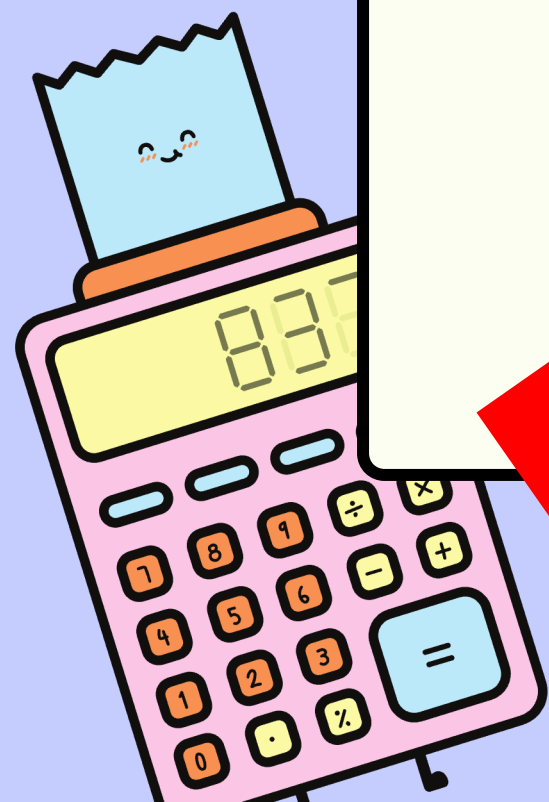
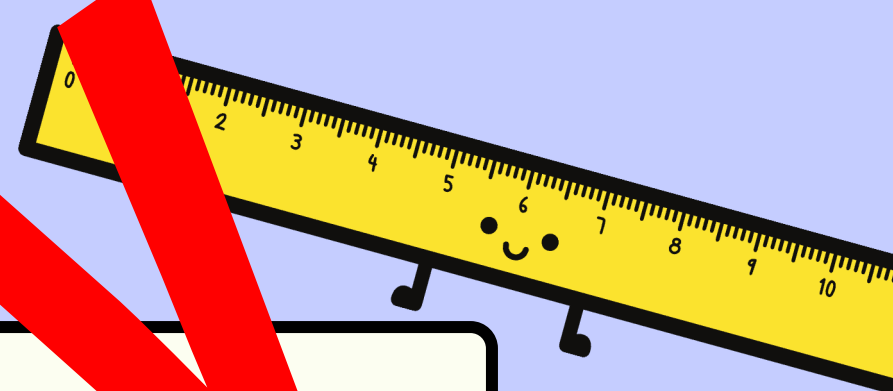
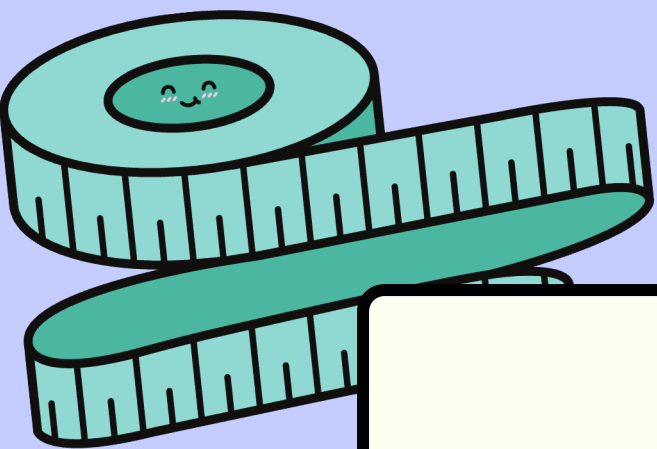
YEAR 5 MULTIPLICATION RUBRIC



Student: _____ Date: _____

CRITERIA	BEGINNING	DEVELOPING	ACHIEVING	CONFIDENT	EXCEEDING
Facts and place value	Needs support with facts and place value.	Provides some facts; occasional errors occur.	Uses facts and place value accurately.	Uses facts fluently across larger numbers.	Uses facts flexibly and explains place-value links.
Strategy selection	Needs a method chosen for them.	Chooses a method with prompting.	Chooses a suitable method.	Chooses efficient methods independently.	Compares methods and justifies the best choice.
Calculation accuracy	Products are often incomplete or inaccurate.	Completes parts correctly; errors remain.	Calculates products accurately.	Maintains accuracy with complex products.	Calculates efficiently and verifies precision.
Checking and reasonableness	Rarely checks results.	Checks when reminded.	Uses estimation to check results.	Checks consistently using more than one approach.	Identifies, explains and corrects errors independently.
Mathematical explanation	Gives little explanation.	Describes some steps.	Explains the chosen method clearly.	Connects steps to place value.	Compares strategies using precise mathematical language.

Overall level: _____ Teacher comment: _____



PREVIEW

Year 5 Multiplication



Learning Goal

We are learning to choose and use efficient multiplication strategies.

Success criteria

- estimate before calculating
- show clear working
- choose partitioning, area, lattice or long multiplication
- check whether the answer is reasonable



Facts and Place Value

Known facts help us solve larger products.

$$6 \times 8 = 48$$

$$60 \times 8 = 480$$

$$600 \times 8 = 4,800$$

The digits stay connected with their place values change.



Estimate First

Round one or both factors to friendly numbers

$$198 \times 24 \approx 200 \times 20$$

$$200 \times 20 = 4,000$$

The exact product is 4,752, which is close to the estimate.

An estimate gives us a useful reasonableness check.



Partitioning: One-Digit Multiplier

Split the larger factor by place value.

$$84 \times 6$$

$$= (80 \times 6) + (4 \times 6)$$

$$= 480 + 24$$

$$= 504$$

Multiply every part, then combine the partial products.



Partitioning: Larger Numbers

$$1,203 \times 4$$

$$= (1,000 \times 4) + (200 \times 4) + (3 \times 4)$$

$$= 4,000 + 800 + 12$$

$$= 4,812$$

A zero place-value part can be omitted, but its place still matters.



Area Model: 36×24

Partition both factors: $36 = 30 + 6$ and $24 = 20 + 4$.

$$30 \times 20 = 600 \quad 30 \times 4 = 120$$

$$6 \times 20 = 120 \quad 6 \times 4 = 24$$

$$600 + 120 + 120 + 24 = 864$$

The four regions account for the product of both factors.



Area Model: 125×32

Partition 125 into $100 + 20 + 5$ and 32 into $30 + 2$.

$$3,000 + 600 + 150$$

$$+ 200 + 40 + 10$$

$$= 4,000$$

Add all six partial products to find the product.



Lattice Multiplication: 63 × 57

1. Draw a 2×2 lattice and split each cell diagonally.
2. Write 6 and 3 across the top; write 5 and 7 down the side.
3. Record each two-digit cell product across its diagonal.
4. Add along the diagonals from right to left, carrying as needed.

$$63 \times 57 = 3,591$$



Long Multiplication: 508 × 6

Keep the digits aligned by place value.

$6 \times 8 = 48$: write 8 and carry 4 tens.

$6 \times 0 \text{ tens} + 4 \text{ tens} = 4 \text{ tens}$.

$6 \times 5 \text{ hundreds} = 30 \text{ hundreds}$

$$508 \times 6 = 3,048$$



Long Multiplication: 243×18

Multiply by the ones: $243 \times 8 = 1,944$.

Multiply by the tens: $243 \times 10 = 2,430$.

Align the partial products by place value.

$$1,944 + 2,430 = 4,374$$

So, $243 \times 18 = 4,374$.



Choose an Efficient Strategy

Partitioning is useful when a factor splits into friendly parts.

An area model makes every partial product visible.

A lattice keeps multiplication facts and place value organised.

Long multiplication is compact and efficient when the environment is secure.

Different correct strategies can reach the same product.



Check Your Answer

Estimate: $309 \times 27 \approx 300 \times 30 = 9,000$.

Exact product: $309 \times 27 = 8,343$.

8,343 is close to 9,000, so the answer is reasonable.

You can also use inverse division or a calculator to verify a result.

Checking confirms working; it does not replace showing a strategy.



Guided Practice

Choose a strategy, estimate, solve and check.

1. 72×8

2. 46×35

3. $1,204 \times 6$

Compare methods with a partner. Which strategy was most efficient?

Products: 576, 1,610 and 7,224.



Multiplication Market Problem

A market stall packs 24 markers into each box.

There are 36 boxes. How many markers are packed altogether?

Estimate: $40 \times 20 = 800$.

Exact product: $36 \times 24 = 864$.

Answer: The stall packs 864 markers.

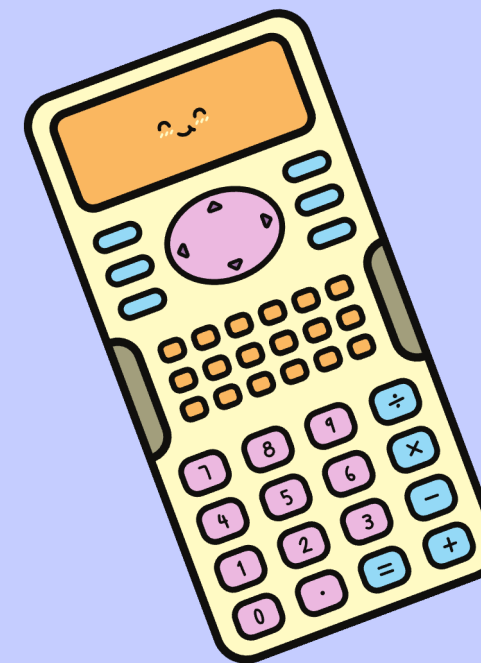
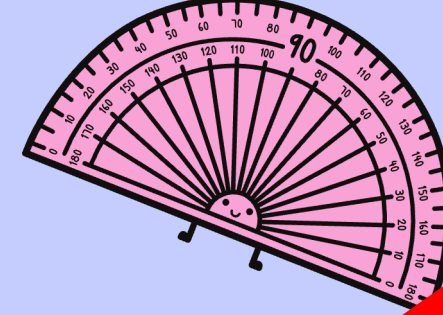
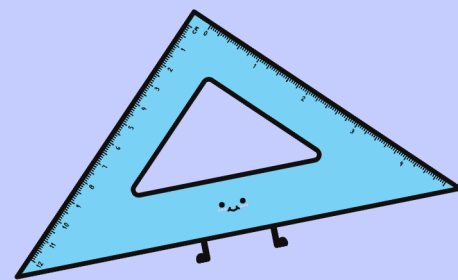
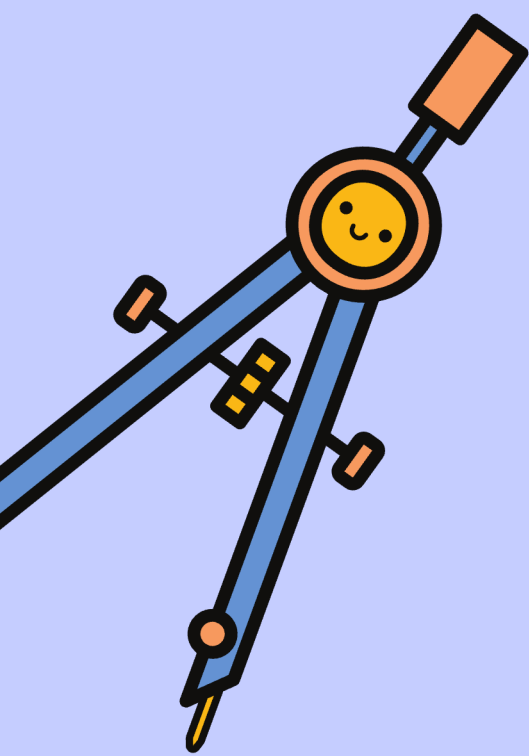
The exact answer is close to the estimate, so it is reasonable.



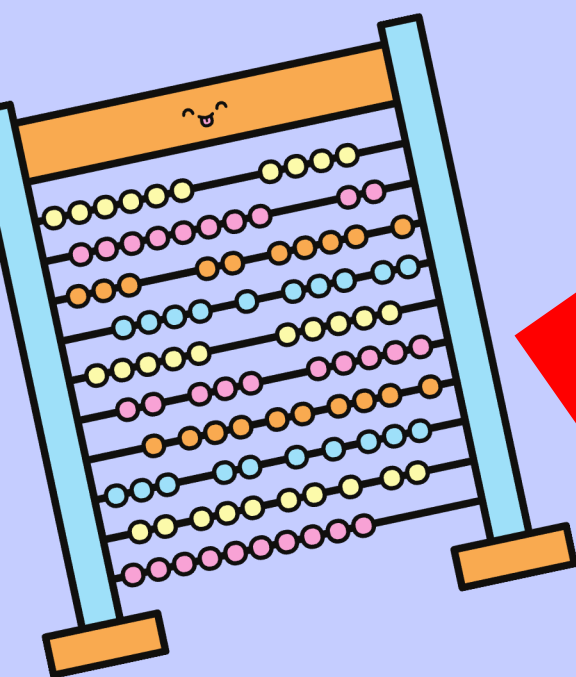
Multiplication Recap

- recall facts and use place value
- estimate before calculating
- partition both factors when needed
- keep every partial product aligned
- choose an efficient strategy
- check that the final product is reasonable

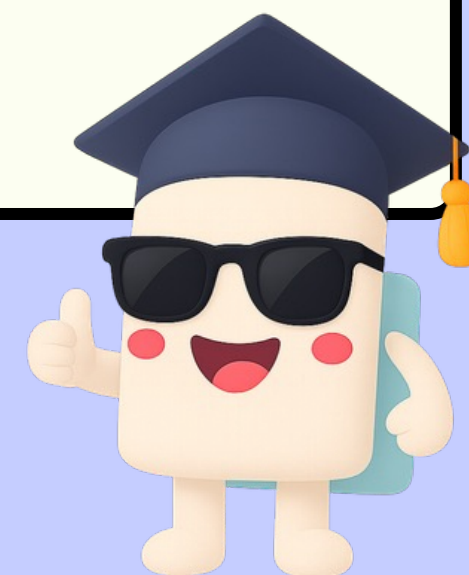
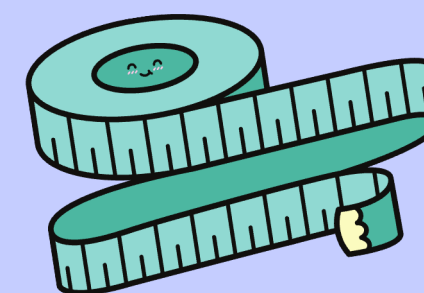
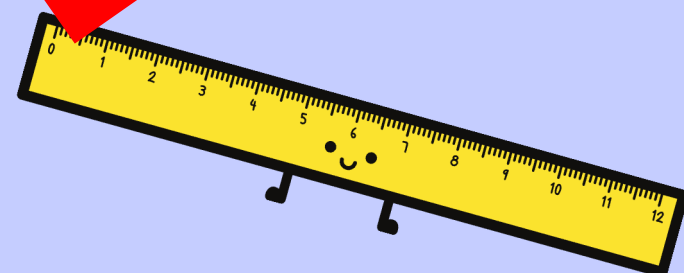


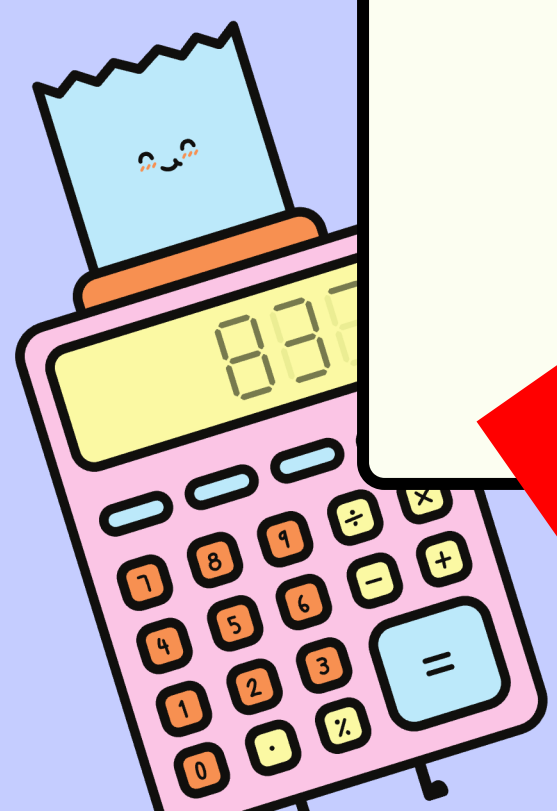
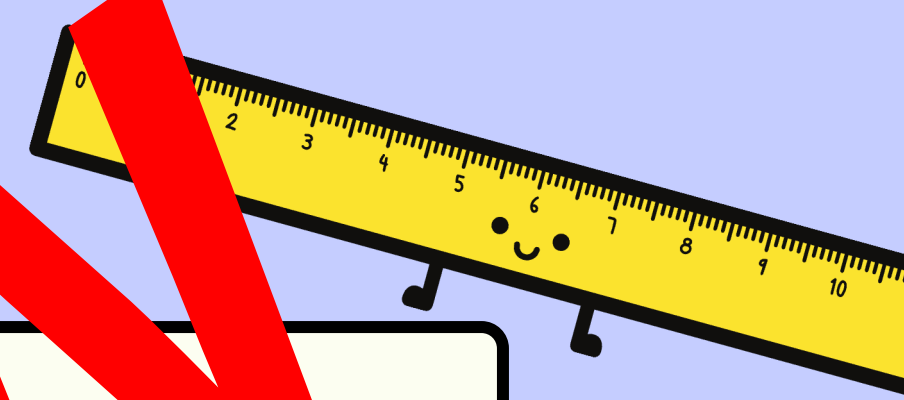
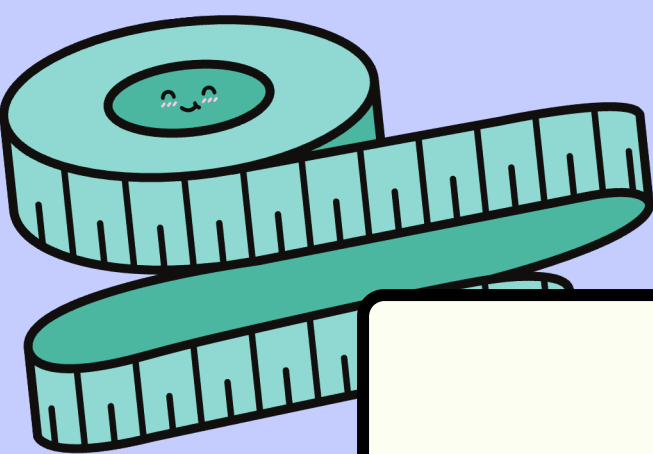


Well Done!



PREVIEW





PREVIEW

Year 5 Multiplication Quiz



Question 1 – True or False

$$60 \times 4 = 240$$

True or False?



Answer 1

True.

$6 \times 4 = 24$, so $60 \times 4 = 240$.



Question 2 – Short Answer

Calculate 326×7 .

Show your working.



Answer 2

$$326 \times 7 = 2,282$$

$$300 \times 7 + 20 \times 7 + 6 \times 7$$

$$= 2,100 + 140 + 42 = 2,282$$



Question 3 – Multiple Choice

Which is the correct partition for 84×6 ?

- A. $(8 \times 6) + (4 \times 6)$
- B. $(80 \times 6) + (4 \times 6)$
- C. (84×3)
- D. $(80 \times 4) + 6$



Answer 3

$$B. (80 \times 6) + (4 \times 6)$$

$$480 + 24 = 504$$



Question 4 – Short Answer

Use an area model to calculate 34×25 .

What is the product?



Answer 4

$$34 \times 25 = 850$$

$$\begin{aligned} &30 \times 20 + 30 \times 5 + 4 \times 20 + 4 \times 5 \\ &= 600 + 150 + 80 + 20 = 850 \end{aligned}$$



Question 5 – Multiple Choice

What is 63×57 ?

- A. 3,291
- B. 3,491
- C. 3,591
- D. 3,691



Answer 5

C. 3,591

$$63 \times 57 = 3,591.$$



Question 6 – True or False

$$508 \times 24 = 12,192$$

True or False?



Answer 6

True.

$$508 \times 4 = 2,032$$

$$508 \times 20 = 10,160$$

$$\text{Total} = 12,192$$



Question 7 – Estimate

Estimate 198×31 by rounding to friendly numbers

PREVIEW



Answer 7

$$198 \times 31 \approx 200 \times 30$$

$$200 \times 30 = 6,000$$



Question 8 – Multiple Choice

Which method is especially efficient for $1,025 \times 4$, and what is the product?

- A. Partitioning; 4,100
- B. Lattice; 4,010
- C. Estimation only; 4,000
- D. Addition; 1,029



Answer 8

A. Partitioning; 4,100

$$(1,000 \times 4) + (20 \times 4) + (5 \times 4) \\ = 4,000 + 80 + 20 = 4,100$$



Question 9 – Word Problem

A stall has 36 boxes with 24 markers in each box.

How many markers are there altogether?



Answer q

$$36 \times 24 = 864$$

There are 864 markers altogether.



Question 10 – Multiple Choice

What is 307×18 ?

- A. 5,426
- B. 5,526
- C. 5,626
- D. 6,526



Answer 10

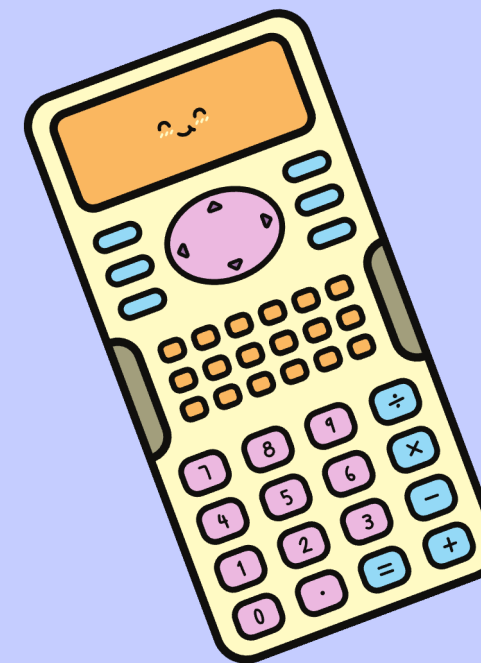
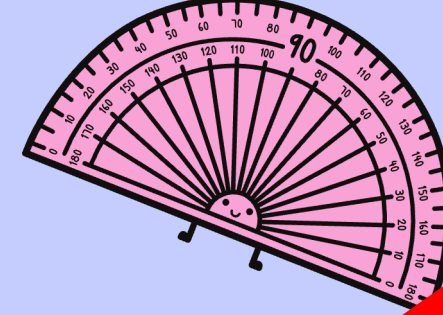
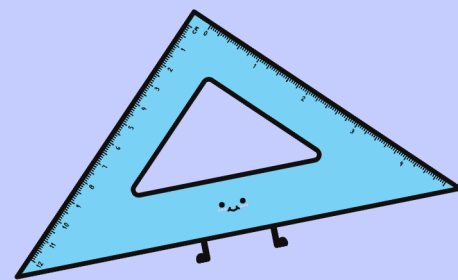
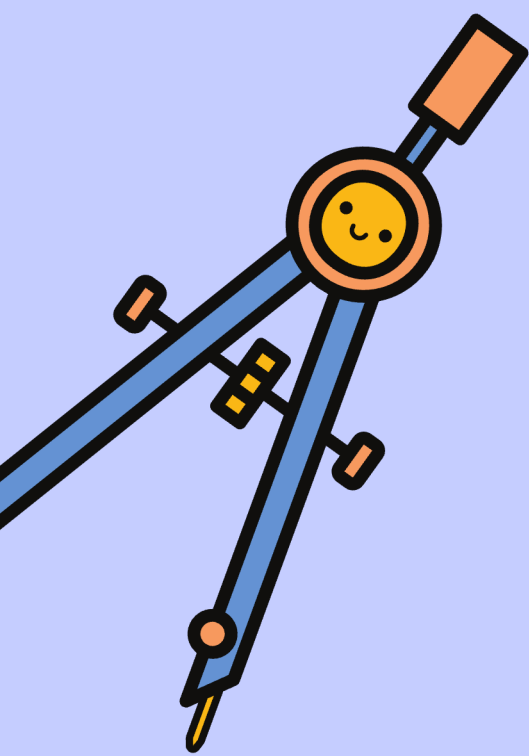
B. 5,526

$$307 \times 8 = 2,456$$

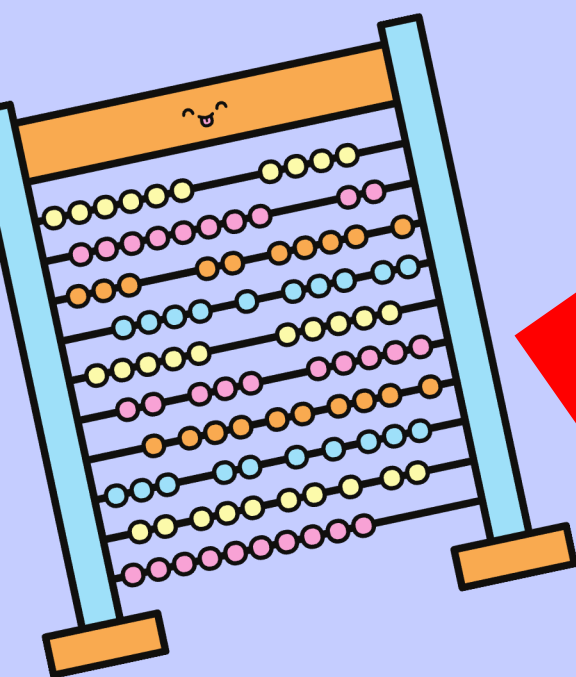
$$307 \times 10 = 3,070$$

$$\text{Total} = 5,526$$





Well Done!



PREVIEW

