

TANG MATH

Brain Builder

2025-2026



Unit 4

Multiply to 10,000

Lessons 34 – 45

LEVEL

D

- 34. Multiply 1-Digit x 3-Digit Multiples of 100**
- 35. Multiply 1-Digit x 3-Digit with Area Models**
- 36. Multiply 1-Digit x 3-Digit with Number Bonds**
- 37. Multiply 1-Digit x 3-Digit with the Partial Products Algorithm**
- 38. Multiply 1-Digit x 3-Digit Story Problems**
- 39. Multiply 1-Digit x 3-Digit Perimeter & Area Problems**

- 40. Multiply 2-Digit x 2-Digit with Area Models**
- 41. Multiply 2-Digit x 2-Digit with Area Models & Number Bonds**
- 42. Multiply 2-Digit x 2-Digit with Number Bonds & PP Algorithm**
- 43. Multiply 2-Digit x 2-Digit Equal-Groups Story Problems**
- 44. Multiply 2-Digit x 2-Digit Comparison Story Problems**
- 45. Multiply 2-Digit x 2-Digit Perimeter & Area Problems**

Name: _____

DIGIT DETECTIVE - A

To solve the puzzle, here's what to do. Cross off the numbers that fit each clue.
With clever sleuth-work, when you're done, you'll be left with only one!

Total cents in
 3×7 dollars

Between 4×600
and 6×500

Total years in
 4×8 centuries

Greater than
 6×700

Less than
 9×200

What number am I?

3200

2500

4500

2700

1600

2100

3600

4800

2800

1200

Name: _____

MAZE - A

Find your way from the top of the maze to the bottom.

Circle the expression if **the product is between 600 and 800**.

3×274	4×223	5×109	5×179	4×183
3×182	2×417	2×410	5×158	3×202
4×201	4×175	3×239	2×399	2×297
2×282	5×121	5×115	2×266	2×443
2×425	2×324	4×155	3×265	3×195
3×291	3×285	5×179	5×136	4×145

Name: _____

WHO AM I? - A

Write the correct answer on the line below each clue.

I am the difference
between
 8×114 and 4×216 .
Who am I?

I am the difference
between
 7×123 and 3×254 .
Who am I?



I am the difference
between
 5×242 and 9×133 .
Who am I?

I am the difference
between
 6×154 and 4×231 .
Who am I?

Name: _____

MAZE - B

Find your way from the top of the maze to the bottom.

Circle the expression if **the product is between 800 and 1000**.

9×123	3×321	2×331	4×198	3×217
7×111	5×189	8×114	6×155	6×189
7×155	6×123	5×142	7×124	5×149
4×321	9×114	5×234	2×428	3×234
3×217	4×331	9×109	4×207	4×198
3×234	4×185	8×116	5×217	6×116

Name: _____

FILL IN THE BLANK - A

Use digits from the bank to correctly fill the blanks in each word problem.
Each digit can be used only once.

Digit Bank

4 5 6 7 8 9

.....

The feed lot has ___ pens of cattle with 526 cattle in each pen. There are __,734 cattle in all.

.....

The library has ___ shelves of books. Each shelf contains 242 books. All together, the library has 1,__94 books.

.....

Liam makes \$ ___ per hour. He worked 440 hours last year. He made \$3,__20 in all.

Name: _____

WHO AM I? - B

Write the correct answer on the line below each clue.
Be sure to read carefully!

Each side of a regular octagon is 3×220 inches.
I am the perimeter of the octagon, in inches.

Who am I?

Each side of a regular hexagon is 4×155 cm.
I am the perimeter of the hexagon, in cm.

Who am I?



Each side of a regular pentagon is 3×333 cm.
I am the perimeter of the pentagon, in cm..

Who am I?

Each side of a regular nonagon is 5×162 inches.
I am the perimeter of the nonagon, in inches.

Who am I?

Name: _____

DIGIT DETECTIVE - B

To solve the puzzle, here's what to do. Cross off the numbers that fit each clue.
With clever sleuth-work, when you're done, you'll be left with only one!

Greater than
 52×81

43×44

Less than
 22×65

Hours in 92 days

Inches in 74 yards

What number am I?

1233

1892

4410

1776

4336

2664

1350

1428

2208

4215

Name: _____

MAZE - C

Find your way from the top of the maze to the bottom.

Circle the expression if the answer is **odd and greater than 500**.

18×40	51×17	39×20	36×20	23×15
27×17	37×21	23×29	43×17	19×35
52×12	38×18	17×25	17×29	33×25
25×15	13×41	39×21	23×27	39×19
39×11	35×15	19×34	23×19	37×16
23×21	27×25	32×25	19×21	21×21

Name: _____

WHO AM I? - C

Write the correct answer on the line below each clue.

I am the difference
between
 24×32 and 48×15 .
Who am I?

I am the difference
between
 55×55 and 63×48 .
Who am I?



I am the difference
between
 82×20 and 76×21 .
Who am I?

I am the difference
between
 95×15 and 63×22 .
Who am I?

Name: _____

FILL IN THE BLANK - B

Use digits from the bank to correctly fill the blanks in each word problem.
Each digit can be used only once.

Digit Bank

1 2 3 4 5 6 7 8 9

.....

The library has 3__ shelves of reference books. Each shelf contains 29 books. All together, the library has __ __6 reference books.

.....

The fruit stand has __5 crates of apples with 53 apples in each crate. There are 1__2__ apples in all.

.....

Jeff charges \$__ __ to clean a house. He cleaned __8 houses over the summer. He made \$1,368 in all.

Name: _____

FILL IN THE BLANK - C

Use two numbers from each bank to correctly fill the blanks in the word problem below.
Be sure to use the clues!

15 17 385 425

At the school carnival, Devon won 25 times as many tickets as Kyle.

Kyle won _____ tickets. Devon won _____ tickets.

16 31 224 434

River won 14 times as many tickets as Sue. Sue won _____ tickets.

River won _____ tickets.

Clue: Devon won fewer tickets than River.

15 20 420 560

Sabin won 28 times as many tickets as Lynn. Lynn won _____ tickets.

Sabin won _____ tickets.

Clue: River won more tickets than Sabin.

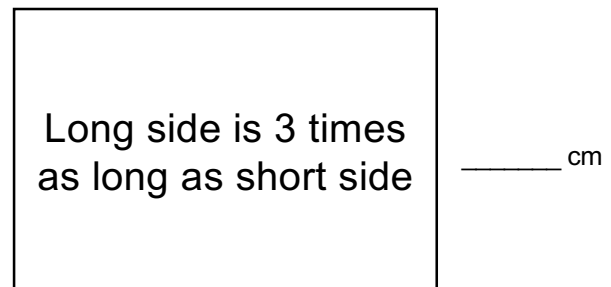
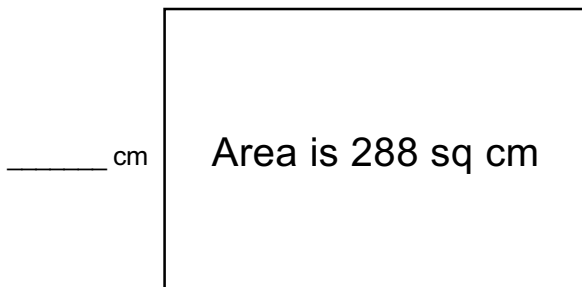
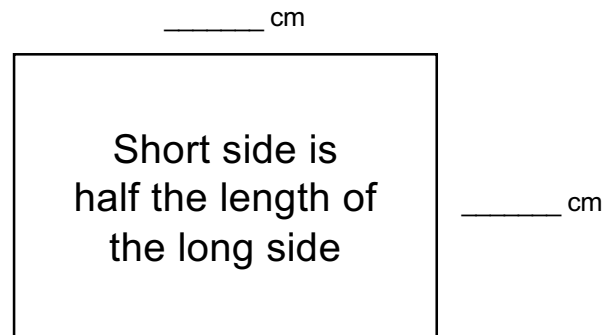
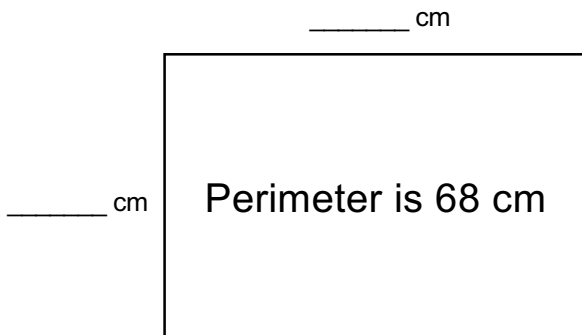
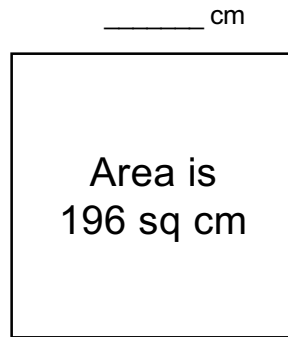
Name: _____

GO FIGURE

Use the numbers from the bank and the provided clues to correctly label the sides of each rectangle. Each number can be used only once. *Figures are not drawn to scale.*

Number Bank

8 10 12 14 16 18 20 22 24



_____ cm

_____ cm