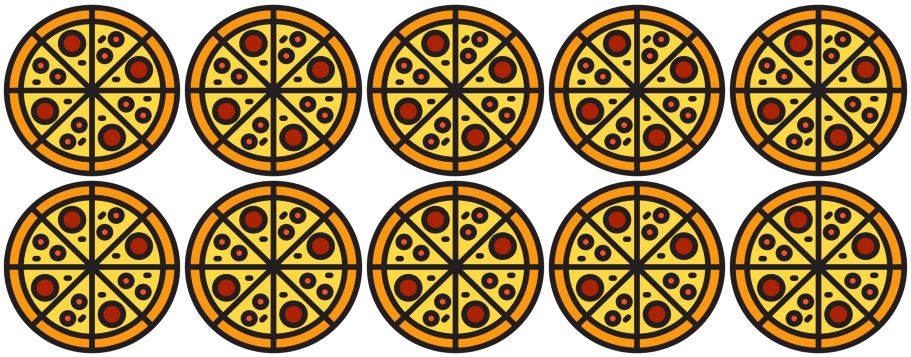
Helping With Math

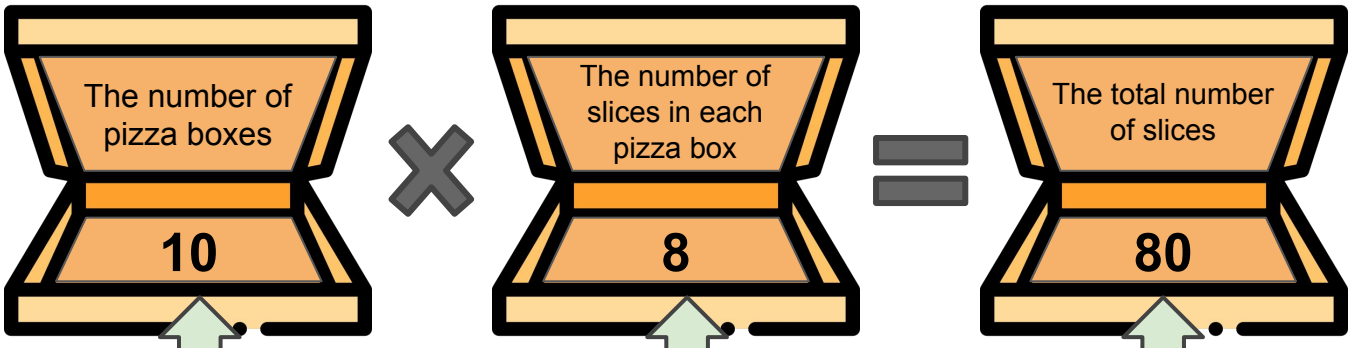
Multiplying One-Digit Whole Numbers by Multiples of 10

GRADE 3

Multiplication is all about Equal Groups. We can multiply one-digit whole numbers by multiple of 10. Digit is any one of the ten symbols 0-9 used to write numbers. Meanwhile, multiples of 10 are all the products of multiplying by 10.



Find the total number of pizza slices.



10 groups of pizza with equal number of slices

8 slices of pizza in each group

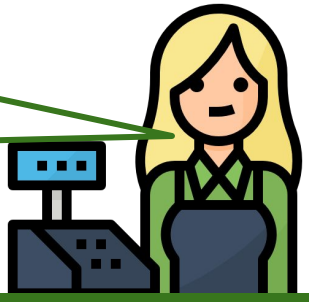
Therefore, the product of 10x8 is 80

Multiplying One-digit Number by Multiples of 10 using Strategies

ONE-DIGIT WHOLE NUMBERS	0, 1, 2, 3, 4, 5, 6, 7, 8, 9

MULTIPLES OF 10	10, 20, 30, 40, 50, 60, 70, 80, 90

We can multiply one-digit numbers by multiples of 10 using strategies based on place value and operation properties



Example: 2 × 50

Using Operation Property:

2 x 50 = ?

= 2 × (5 × 10)

= (2 × 5) × 10

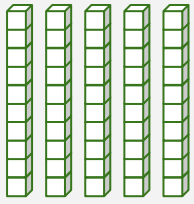
= 10 x 10

= 100

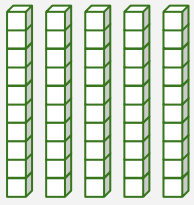
If one of the factors is a multiple of 10, the product will be a multiple of 10.

Using Place Value:

2 groups of 5 tens



1st group

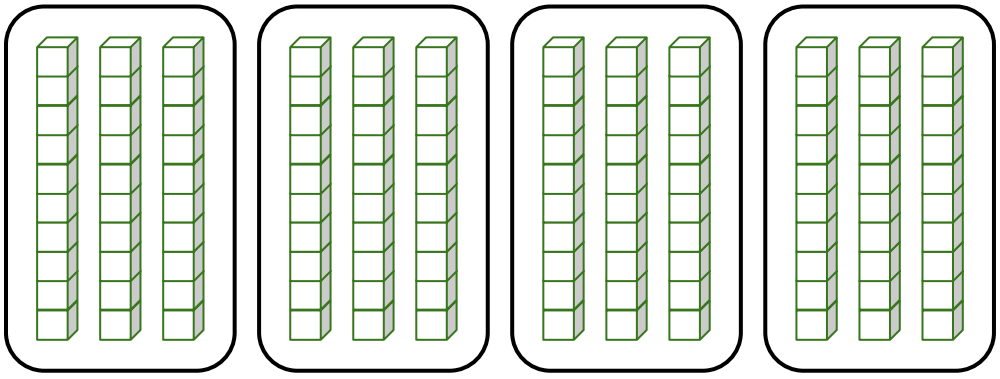


2nd group

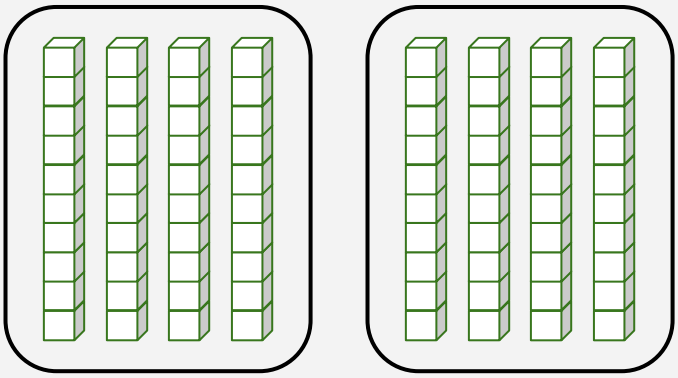
2 x 5 tens
10 tens = 100

Draw in tens rods to prove the solution to the following number sentences

1. 4 x 30 = 120



2. 2 x 40 = 80



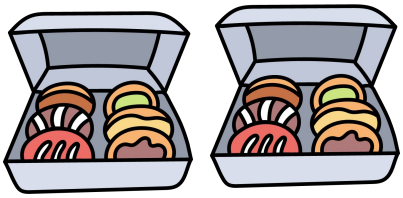
3. 5 x 20 = _____

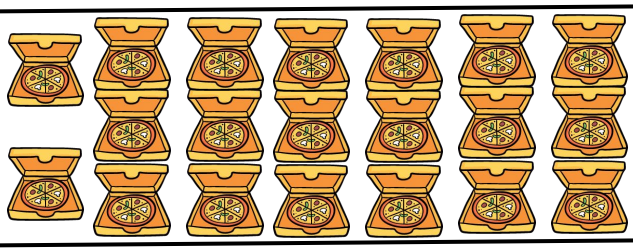
TABLE OF ACTIVITIES

THE BOXES

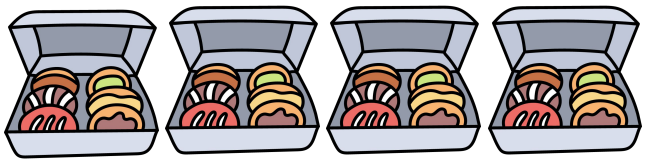
There are six customers. How much would each customer pay if a box of pizza costs $8 and a box of donut costs $10? Complete the equations based on the figure.

1.  = ___ x 8 = $___

2.  = ___ x ___ = $20

3.  = 20 x ___ = $___

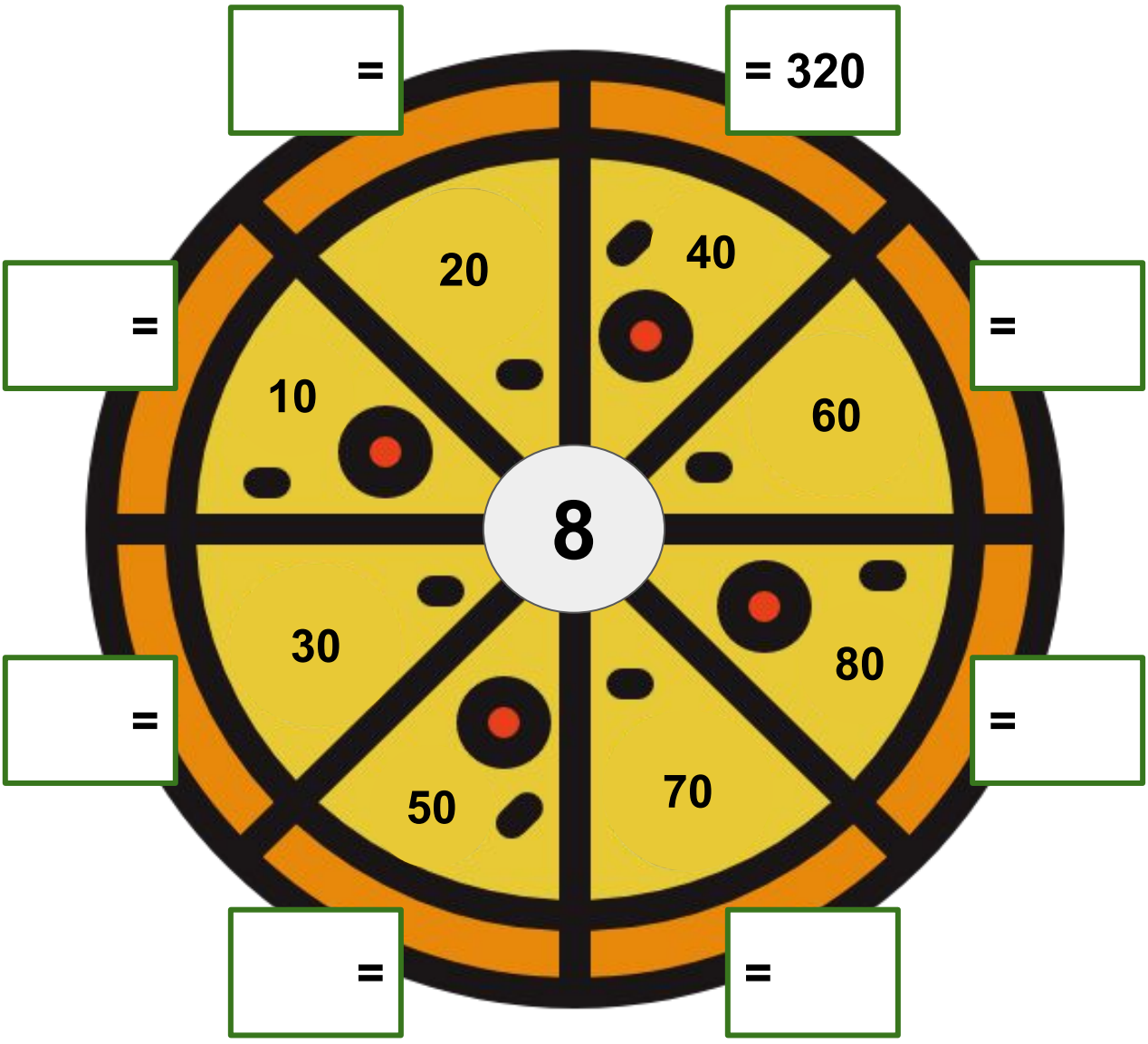
4.  = ___ x 10 = $___

5.  = ___ x ___ = $40

6.  = 1 x ___ = $___

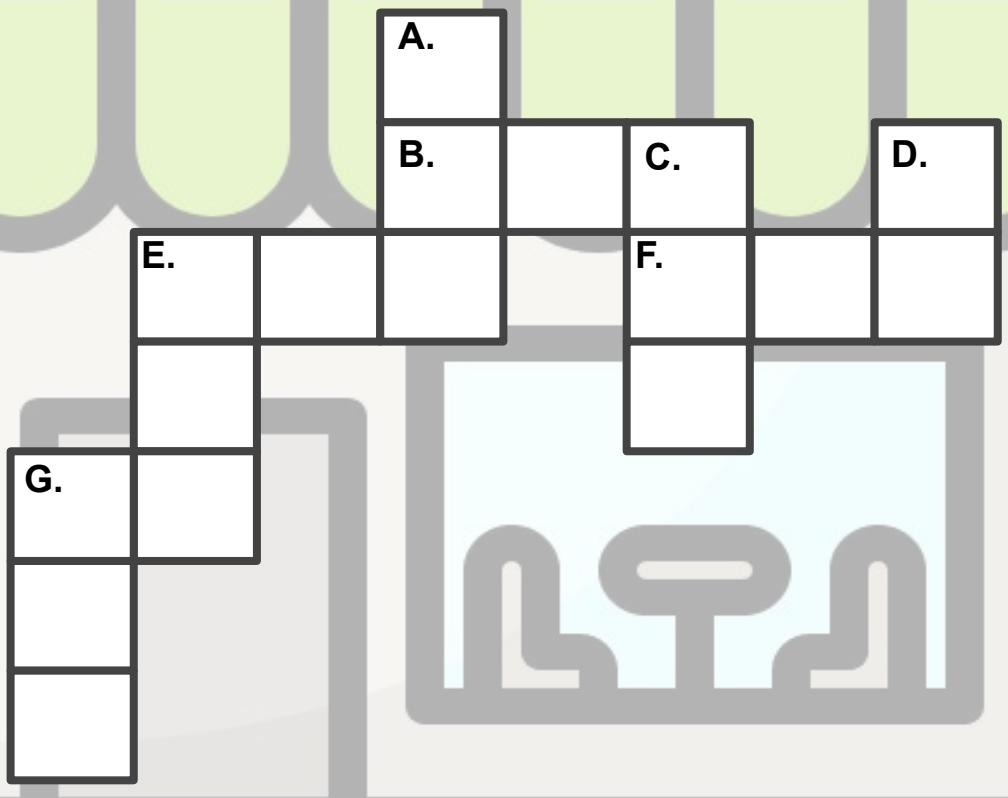
PRODUCT OF PIZZA

Anna and her friends loves pizza. A box of pizza costs $8. Multiply the numbers on each slice by the amount of pizza. Write your answer on the box.



CROSSNUMBER PUZZLE

Help the fast food owner find out how much they sold. Find the answer by multiplying the amount of each item by the number of items sold. Write each product in the crossnumber puzzle.



ACROSS:

B. $90 X 3 = _____

E. $50 X 9 = _____

F. $60 X 4 = _____

G. $20 X 3 = _____

DOWN:

A. $40 X 8 = _____

C. $20 X 1 = _____

D. $10 X 6 = _____

E. $80 X 5 = _____

G. $90 X 7 = _____

BURGER10

There are nine customers at Burger10. Help the cashier compute how much should each customer pay if the special burger costs $10. Shade the box that shows the right answer.

1. 10 x 7 = ?

70	71	107

2. 10 x 2 = ?

12	22	20

3. 10 x 6 = ?

96	60	106

4. 10 x 3 = ?

300	39	30

5. 10 x 9 = ?

90	70	190

6. 10 x 5 = ?

15	50	10

7. 10 x 8 = ?

80	380	240

8. 10 x 1 = ?

10	11	31

9. 10 x 4 = ?

40	410	41

FAST-TRIVIA

Help Jordan learn the fast food trivia by solving the equations. Match the letter of the problem to its correct number at the bottom of the page.

What is the world's Largest Toy Distributor?

M	5 x 30 = _____
A	90 x 2 = _____
S	4 x 70 = _____
O	20 x 8 = _____
L	1 x 50 = _____
D	40 x 3 = _____
N	60 x 5 = _____
C	20 x 5 = _____
D	9 x 10 = _____

The answer is:

____	____	____	____	____	____	____	____	____
150	100	90	160	300	180	50	120	280

MATCHING PRODUCT

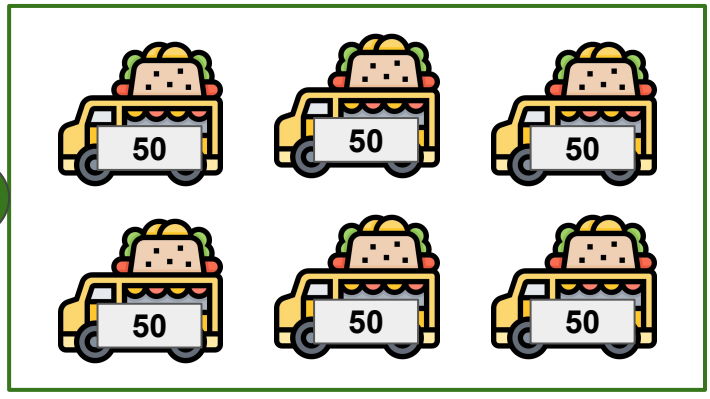
Help the food cart vendors find their matching products by solving the equations. Match the answer to the food cart with similar product.

1. 1 x 80 = ___

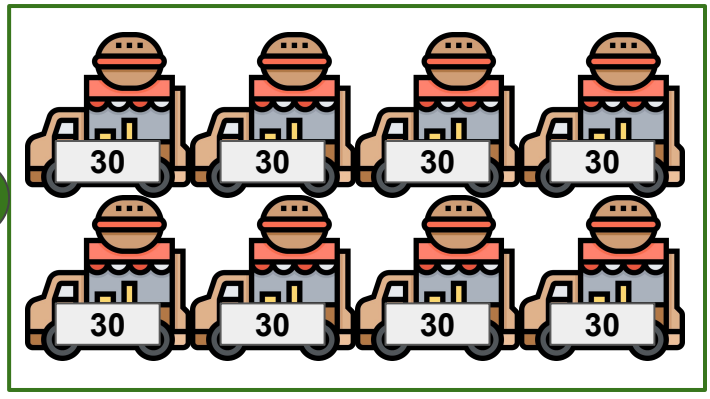
2. 5 x 60 = ___

3. 6 x 40 = ___

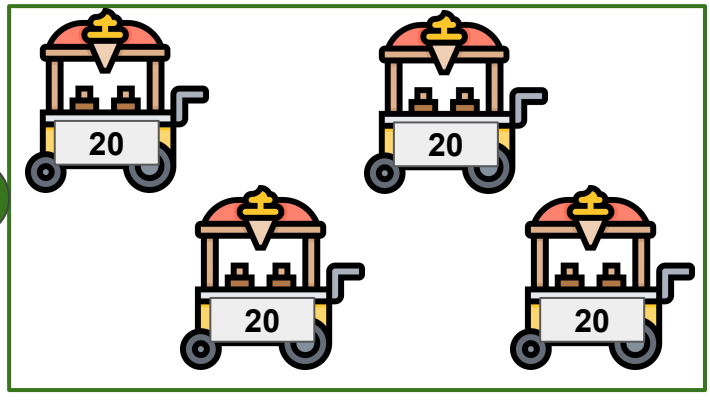
A



B



C



CUT AND PASTE

Olivia wants to eat in a fast food restaurant, but she is not allowed unless she's done with her homework. Help her solve the following equations using Place Value strategy. Cut your answers from the choices below and paste them to the space provided.

1. 2 x 70 = ____ = ____ = ____
2. 60 x 8 = ____ = ____ = ____
3. 5 x 60 = ____ = ____ = ____
4. 9 x 90 = ____ = ____ = ____
5. 30 x 5 = ____ = ____ = ____

2 x 7 tens	3 tens x 5	5 x 6 tens	6 tens x 8	9 x 9 tens
30 tens	14 tens	48 tens	15 tens	81 tens
150	810	300	140	480

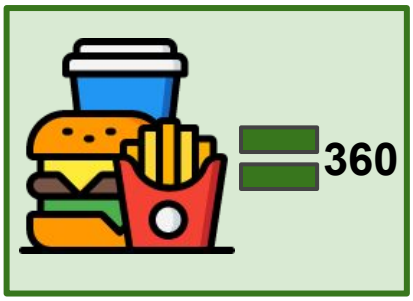
BINGO!

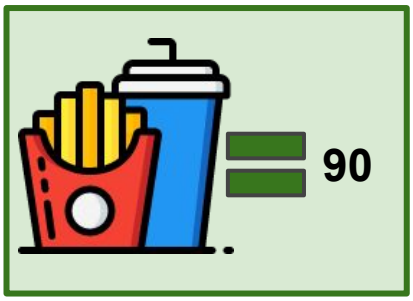
Help the cashier of the fast food restaurant cross-out the boxes of equations that have correct answers.

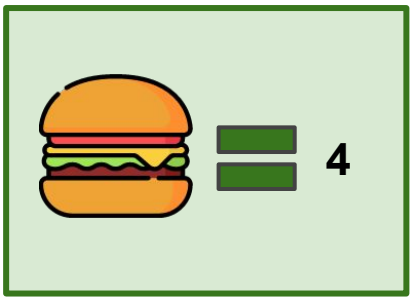
3 x 10 = 31	2 x 30 = 60	50 x 2 = 200	6 x 60 = 360	9 x 80 = 980
8 x 70 = 700	90 x 2 = 180	10 x 2 = 210	50 x 8 = 400	7 x 30 = 20
6 x 10 = 100	50 x 3 = 130	4 x 20 = 80	40 x 1 = 41	10 x 5 = 150
60 x 4 = 240	70 x 4 = 20	80 x 5 = 85	6 x 30 = 170	3 x 90 = 270
70 x 2 = 270	8 x 40 = 320	60 x 9 = 540	7 x 10 = 70	2 x 20 = 60

TWO LIES

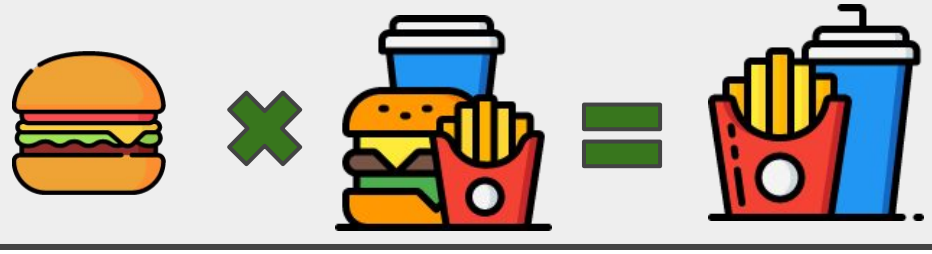
Given the value of burger, fries and drinks that Jayden bought. Use your math skills to determine which of the three statements below is true! Explain your answer.







1



2

3

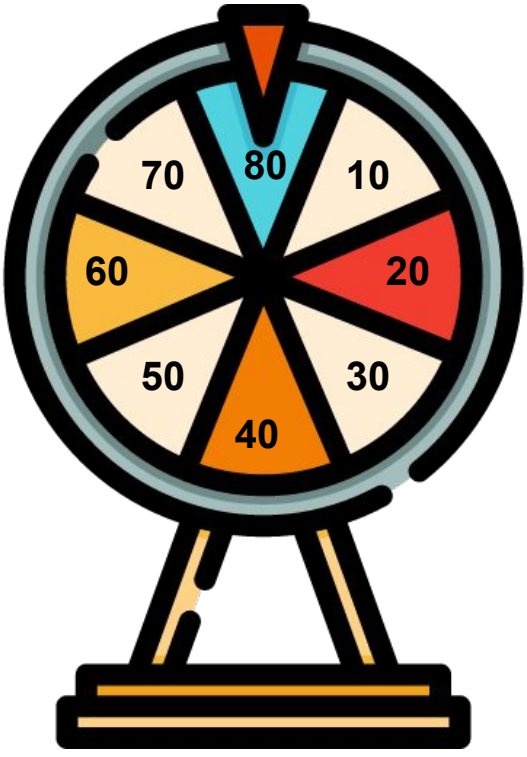
Answer:

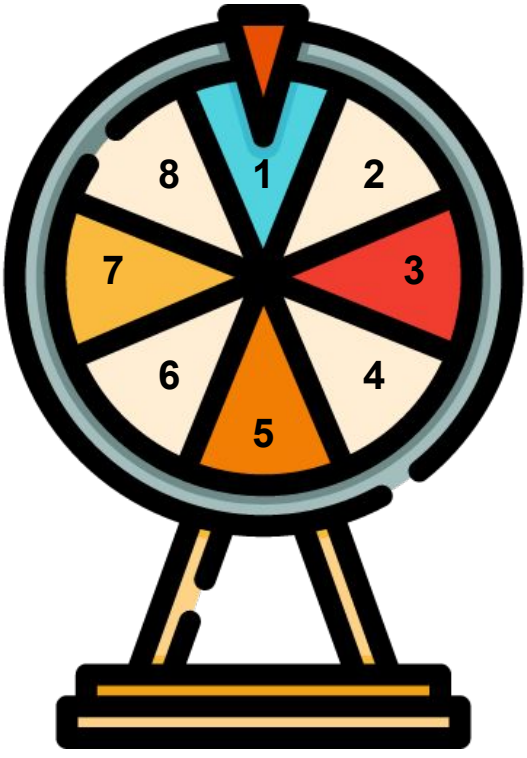
SPIN AND SOLVE

In a fast food restaurant, each customer is given a chance to spin two roulettes and solve to get a free meal. Write the multiplication problem below.

CUSTOMER #1	CUSTOMER #2	CUSTOMER #3
✖ _____	✖ _____	✖ _____

CUSTOMER #4	CUSTOMER #5	CUSTOMER #6
✖ _____	✖ _____	✖ _____



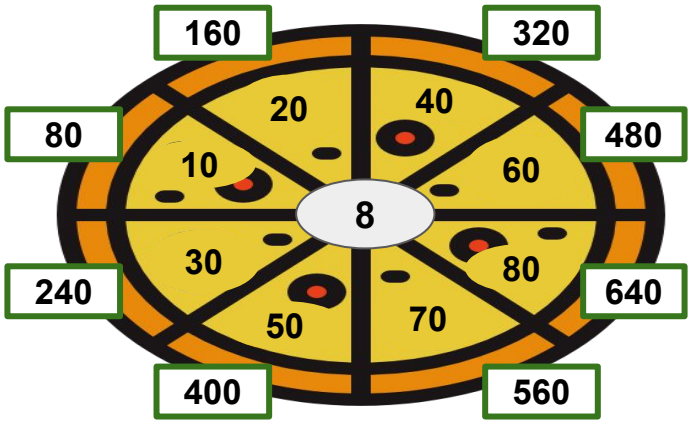


ANSWER GUIDE

Activity 1

1. 10, 80	3. 8, 160	5. 4, 10
2. 2, 10	4. 3, 30	6. 10, 10

Activity 2



Activity 3

Across:	B. 270	E. 450	F. 240	G. 60	
Down:	A.320	C. 20	D. 60	E. 400	G. 630

Activity 4

1. 70	5. 900	9. 40
2. 20	6. 50	
3. 60	7. 80	
4. 30	8. 10	

Activity 5

MCDONALDS

ANSWER GUIDE

Activity 6

1. C
2. A
3. B

Activity 7

1. 2 x 7 tens = 14 tens = 140
2. 6 tens x 8 = 48 tens = 480
3. 5 x 6 tens = 30 tens = 300
4. 9 x 9 tens = 81 tens = 810
5. 3 tens x 5 = 15 tens = 150

Activity 8

2 x 30 = 60	3 x 90 = 270
6 x 60 = 360	8 x 40 = 320
90 x 2 = 180	60 x 4 = 240
50 x 8 = 400	60 x 9 = 540
4 x 20 = 80	7 x 10 = 70

Activity 9

2

Activity 10

Answer varies depending on the spin.

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