MEMORIZE IN MINUTES:

The Times Tables

The *FASTEST* and *EASIEST* way to teach the *TIMES TABLES*

Student Manual – Revised 2014

Alan Walker

Multiplication
Repeated Addition

$$
\begin{array}{r}
3 \\
3 \\
3 \\
3 \\
+\,3 \\
\hline
15
\end{array}
$$

OR

$$3 \times 5 = 15$$

The multiplication facts are really just a short-cut way of adding. The multiplication fact 3 x 5 really means 3 + 3 + 3 + 3 +3.

If you add 3 + 3 + 3 + 3 + 3 you get 15. So, the multiplication fact 3 x 5 also equals 15.

Remember: Multiplication is just a quick way of adding.

Commutative Property
Of Multiplication

$$
\begin{array}{r}
3 \\
3 \\
3 \\
3 \\
+\,3 \\
\hline
15
\end{array}
$$

Five groups of three is the same as three groups of five.

$$
\begin{array}{r}
5 \\
5 \\
+\,5 \\
\hline
15
\end{array}
$$

The commutative property is just a fancy way of saying it doesn't matter which number is first. The answer will be the same.

**3 x 5 = 15
and
5 x 3 = 15**

In addition, adding 3 five times will give you the same answer as adding 5 three times.

**3 + 3 + 3 + 3 + 3 = 15
and
5 + 5 + 5 = 15**

<table>
<tr><td>

Multiplication Facts
ZEROS and ONES

</td><td>

The 0s and 1s multiplication facts are really easy.

</td></tr>
</table>

```
   6    0    9    0    5    0    7
 x 0  x 2  x 0  x 4  x 0  x 3  x 0
 ___  ___  ___  ___  ___  ___  ___
   0    0    0    0    0    0    0
```

(WOW, the zero's are EASY!)

```
   8    1    1    5    3    4    1
 x 1  x 2  x 9  x 1  x 1  x 1  x 6
 ___  ___  ___  ___  ___  ___  ___
   8    2    9    5    3    4    6
```

(The ones are EASY also!)

ZEROS

Any number times 0 is always zero. When you think of it as repeated addition, it's just as easy. The multiplication fact 0 x 5 means zero added together five times or 0 + 0 + 0 + 0 + 0.

ONES

Any number multiplied by one is itself. The multiplication fact 6 x 1 means six added one time or six. Or, using the commutative property 6 x 1 is the same a 1 x 6. Which means one added together six times or six.

Basic Multiplication Facts
100 Facts

This chart shows all 100 multiplication facts

	0	1	2	3	4	5	6	7	8	9
0	0x0	0x1	0x2	0x3	3x4	0x5	0x6	0x7	0x8	0x9
1	1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
2	2x0	2x1	2x2	2x3	2x4	2x5	2x6	2x7	2x8	2x9
3	3x0	3x1	3x2	3x3	3x4	3x5	3x6	3x7	3x8	3x9
4	4x0	4x1	4x2	4x3	4x4	4x5	4x6	4x7	4x8	4x9
5	5x0	5x1	5x2	5x3	5x4	5x5	5x6	5x7	5x8	5x9
6	6x0	6x1	6x2	6x3	6x4	6x5	6x6	6x7	6x8	6x9
7	7x0	7x1	7x2	7x3	7x4	7x5	7x6	7x7	7x8	7x9
8	8x0	8x1	8x2	8x3	8x4	8x5	8x6	8x7	8x8	8x9
9	9x9	9x1	9x2	9x3	9x4	9x5	9x6	9x7	9x8	9x9

Look at the first chart on the next page. The shaded facts are facts you don't need to learn because of the commutative property of multiplication.

You already know the zero and one multiplication facts. The shaded facts in the chart that follows shows the facts that are repeated, the zeros, and ones.
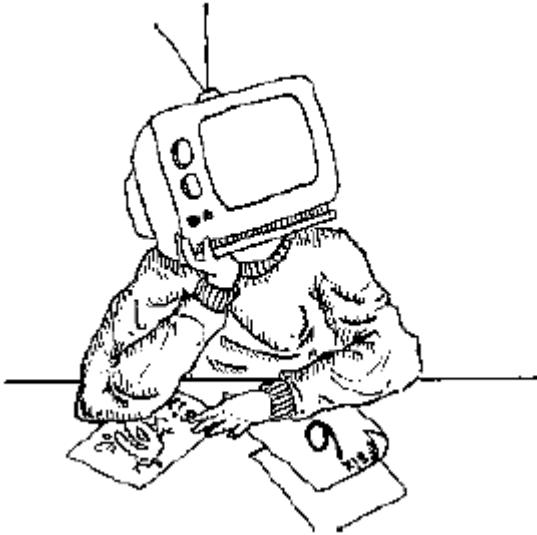
Multiplication Fact Chart (With Repeats Shaded)

	0	1	2	3	4	5	6	7	8	9
0	0x0	1x0	2x0	3x0	4x0	5x0	6x0	7x0	8x0	9x0
1	0x1	1x1	2x1	3x1	4x1	5x1	6x1	7x1	8x1	9x1
2	0x2	1x2	2x2	3x2	4x2	5x2	6x2	7x2	8x2	9x2
3	0x3	1x3	2x3	3x3	4x3	5x3	6x3	7x3	8x3	9x3
4	0x4	1x4	2x4	3x4	4x4	5x4	6x4	7x4	8x4	9x4
5	0x5	1x5	2x5	3x5	4x5	5x5	6x5	7x5	8x5	9x5
6	0x6	1x6	2x6	3x6	4x6	5x6	6x6	7x6	8x6	9x6
7	0x7	1x7	2x7	3x7	4x7	5x7	6x7	7x7	8x7	9x7
8	0x8	1x8	2x8	3x8	4x8	5x8	6x8	7x8	8x8	9x8
9	0x9	1x9	2x9	3x9	4x9	5x9	6x9	7x9	8x9	9x9

Multiplication Fact Chart (With Repeats, 0's and 1's Shaded)

	0	1	2	3	4	5	6	7	8	9
0	0x0	1x0	2x0	3x0	4x0	5x0	6x0	7x0	8x0	9x0
1	0x1	1x1	2x1	3x1	4x1	5x1	6x1	7x1	8x1	9x1
2	0x2	1x2	2x2	3x2	4x2	5x2	6x2	7x2	8x2	9x2
3	0x3	1x3	2x3	3x3	4x3	5x3	6x3	7x3	8x3	9x3
4	0x4	1x4	2x4	3x4	4x4	5x4	6x4	7x4	8x4	9x4
5	0x5	1x5	2x5	3x5	4x5	5x5	6x5	7x5	8x5	9x5
6	0x6	1x6	2x6	3x6	4x6	5x6	6x6	7x6	8x6	9x6
7	0x7	1x7	2x7	3x7	4x7	5x7	6x7	7x7	8x7	9x7
8	0x8	1x8	2x8	3x8	4x8	5x8	6x8	7x8	8x8	9x8
9	0x9	1x9	2x9	3x9	4x9	5x9	6x9	7x9	8x9	9x9

Remembering
With Pictures

Your brain operates like a television set and you can see pictures anytime you want. (It even operates when you are asleep, showing you dreams.) Pictures are easy for your brain to remember. Sometimes, numbers are hard to remember. So, in this book, you will earn the multiplication facts using pictures instead of numbers.

Not only do you have a built in television, you also have a built in DVR that can play back pictures any time you want. Once you see a picture, your brain stores it away and can play it back anytime you want.

Your brain remembers funny pictures better than it remembers regular pictures. So, in this book, you will be storing funny pictures that are easy to replay.

Lasting Memories

Memorizing tips:
1. **Pay Attention**
   Sometimes, memory is more a problem of attention than retention.

2. **Use Your Imagination**
   The more vivid and creative the picture in your mind, the easier it is to remember.

3. **Have FUN**
   Memorizing the times tables with pictures should be fun!

www.MULTIPLICATION.com

Visit www.MULTIPLICATION.com for games, activities, and fun.

Available for FREE at Multiplication.com:

1. Stories and pictures in this booklet are available as animated movies.

2. Super fun arcade style games that help you practice.

3. Self-correcting quizzes that help you check your progress.

4. Activities that help anchor the memories.

	2 = Shoe Two rhymes with shoe.
	3 = Tree Three rhymes with tree. See the three in the tree.
	4 = Door Four rhymes with door. Look at the picture of the door. Do you see the four?
	5 = Hive Five rhymes with hive.
	6 = Chick Six sounds like chick.

Pictures are easier to remember than numbers.

Here are the pictures that you will use to help you remember the numbers two, three, four, five, and six.

	7 = Surfin Seven sounds like surfin. The wave looks like the number seven.
	8 = Skate Eight rhymes with skate. The wheels of a skate form an eight when it is standing straight up.
	9 = Sign Nine rhymes with sign. The sign also has the number 9 on it.

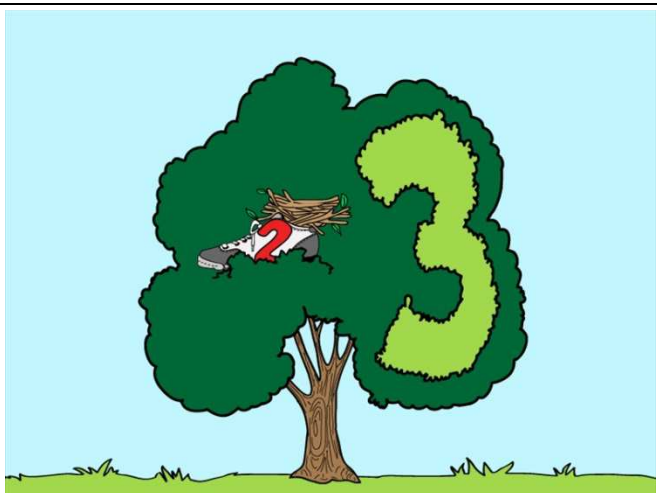These pictures will help you remember the numbers seven, eight, and nine.

2 x 2 = 4

Shoe x Shoe = Floor

A young boy received a new pair of shoes for his birthday. When he put them on, he discovered they were too big, but he decided to wear them to school anyway. Sometimes, as he walked along, he stepped right out of them. The boy found himself in his socks. How frustrating! There was a SHOE (2) and another SHOE (2) sitting on the FLOOR (4).

2 x 3 = 6

Shoe x Tree = Sticks

Two birds were building a nest in a tree. Building a nest was hard work because they could carry only one stick at a time. While they were looking for sticks, the mama bird saw an old shoe lying by a pile of sticks. She had a great idea! She picked up stick after stick and put them into the shoe. When the shoe was full, the birds grabbed the shoe laces and flew back to the tree. They tied the shoe to one of the branches. The SHOE (2) in the TREE (3) made a wonderful nest of STICKS (6).
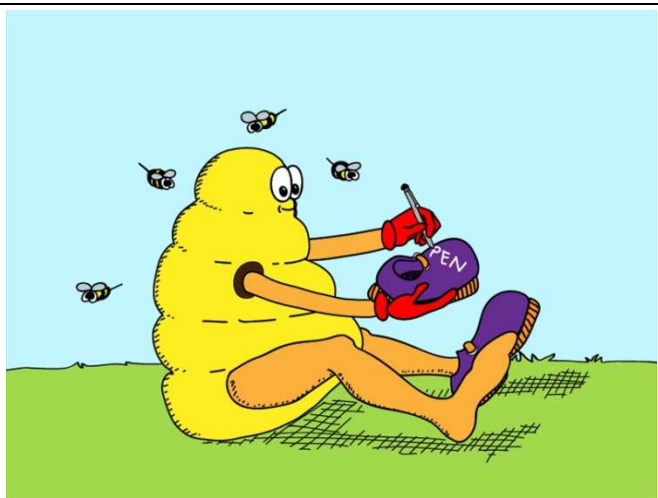
2 x 4 = 8

Shoe x Door = Plates

A family with many children lived in a giant shoe. The children loved to eat, but they hated to wash the dishes! Instead of washing the plates, they would buy more and more. Soon, plates were piled everywhere. After a few months, when they opened the DOOR (4) of the SHOE (2), out rolled the PLATEs (8).

2 x 5 = 10

Shoe x Hive = Pen

Once upon a time there was a little bee hive who was very forgetful. His mom would say, "Don't forget your backpack," but he would forget his backpack. His teacher would say, "Don't forget your homework," but he would forget his homework.   He wrote himself reminders, but he would forget where he put them. One day, he had a brilliant idea.   He decided to write his notes on something he saw all of the time – his shoe! The hive found a special pen that was easy to erase. From then on, the HIVE (5) wrote notes on his SHOE (2) with a special PEN (10).

2 x 6 = 12

Shoe x Chick = Elf

A teacher decided to put on a winter play. A chick was chosen to be an elf, one of Santa's special helpers. The chick was very excited! She rushed home and begged her mom to make her an elf costume. On the day of the play, the little CHICK (6) wore curly-toed SHOEs (2) and had fun pretending to be an ELF (12).

2 x 7 = 14

Shoe x Surfin = Four Kings

Once there were four kings who were great friends. One of the kings had giant feet so he had to wear enormous shoes. One year, the kings went on vacation to the beach. They were amazed at all the people surfing. The kings wanted to try surfing too, but they did not have surfboards. The king with the big feet had an idea. They could surf on his enormous shoes! When they gave it a try, the people on the beach shouted, "Look, SURFIN (7) on giant SHOEs (2) are FOUR KINGS (14)."

2 x 8 = 16

Shoe x Skate = Sick Queen

Once there was a queen who liked to do silly things. One day, she decided to learn to skate. She put on one skate and stood to grab the other skate. Before she knew what was happening, she started rolling faster and faster. When she put her shoe down to stop, she started twirling in circles. She became very dizzy! The twirling queen wearing a SHOE (2) and a SKATE (8) became a very SICK QUEEN (16).
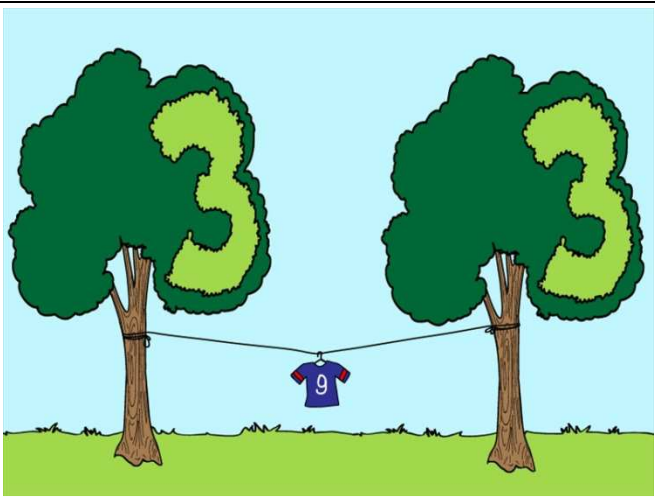
2 x 9 = 18

Shoe x Sign = Aching

Many years ago, there was a giant who lived in a forest. People were afraid of him because he was so big. The lonely giant decided to go to the city to find some friends. During his journey to the city, he saw some construction workers putting up a new sign. The giant walked up to one of the workers and tapped him on the shoulder. When the man saw the giant, he dropped the sign. The SIGN (9) landed on the giant's SHOE (2) and his toe started ACHING (18).

3 x 3 = 9

Tree x Tree = Line

Once there was a boy who loved to play football. One day, while the boy was trying to catch a pass, he slipped and fell into a puddle. His football jersey became soaked with water, so he tied a rope between two trees and hung the jersey to dry. From one TREE (3) to the other TREE (3), the jersey hung on the LINE (9).

3 x 4 = 12

Tree x Door = Elf

Once there was an elf who loved the forest. All day he would wander and play among the tall trees. At night he would lie under the stars and the trees he loved so well. Sometimes he would get cold and wet. He needed a shelter. One day he thought of a great solution. He found a big hollow TREE (3), added a little DOOR (4), and had a cozy ELF (12) home.
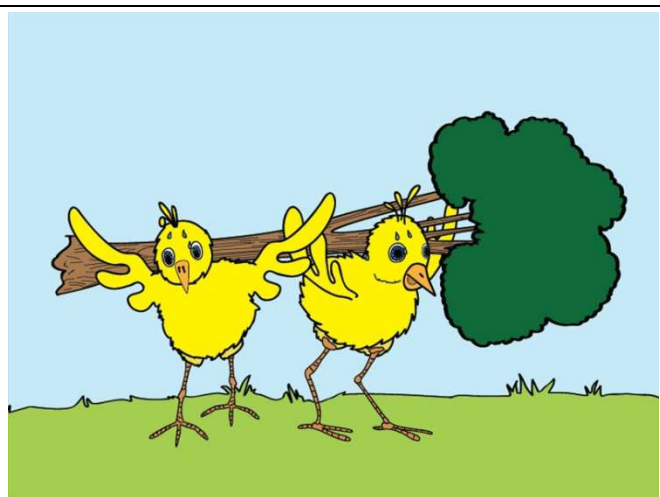
3 x 5 = 15

Tree x Hive = Lifting

Many years ago, there was a kind hearted tree who loved animals. Birds, squirrels, and bees built their homes in his branches. One day a big storm blew a bee hive out of the tree. The bees were scared and buzzed around the hive wondering what they were going to do. Suddenly, the bees in the HIVE (5) felt the TREE (3) LIFTING (15) them safely back into his branches.
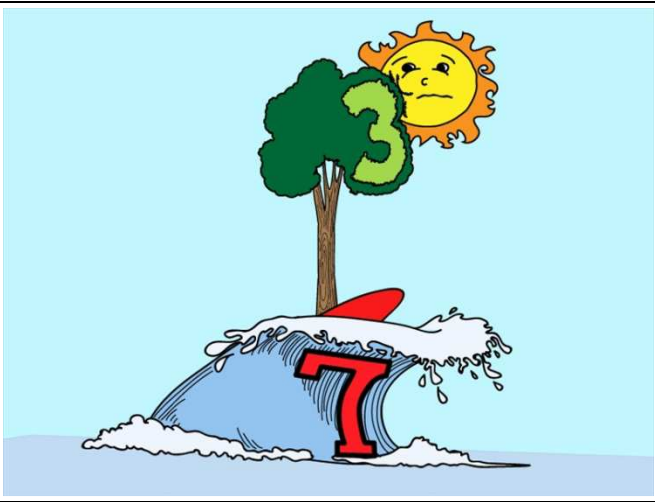
3 x 6 = 18

Tree x Chicks = Aching

One day a storm blew down a big tree right in the middle of a farm. The little chicks were frightened and ran away, but the strongest and bravest chicks came up with a plan. The strong chicks lifted the heavy tree and moved it out of the yard. The CHICKS (6) moved the TREE (3), but their backs were ACHING (18).
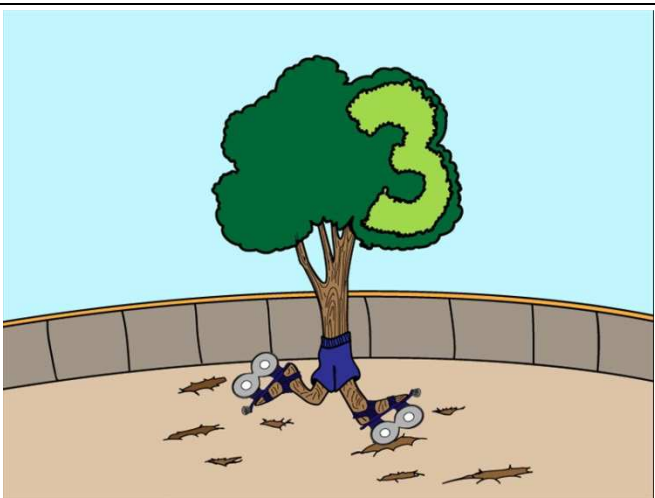
3 x 7 = 21

Tree x Surfin = Denty Sun

A huge tree grew near the ocean. Each day, the tree watched the surfers ride the waves and longed to try surfing. One day the tree pulled up his roots, walked down to the beach, and rented a surfboard. The tree had a wonderful day surfing. Suddenly, a big wave lifted the tree so high it crashed into the sun and left a dent. When the TREE (3) went SURFIN (7), he made a DENTY SUN (21).

3 x 8 = 24

Tree x Skate = Denty Floor

For many years, a tree stood in a park watching children skate in the outdoor roller rink. One day, he decided to have some fun. He put on skates and zoomed around the rink. But, because the tree was so heavy, he caused dents in the floor. When the kids saw what the tree was doing, they told him to stop. The TREE (3) loved to SKATE, (8) but he made a DENTY FLOOR (24).

3 x 9 = 27

Tree x Sign = Denty Chef Van

A tree decided to have a party for her forest friends. She wanted to serve great food, so she called a chef who did his cooking in a special chef van. The tree told the chef she would be waving a sign so she would be easy to see in the forest. As the chef drove through the forest, branches kept hitting and denting his van. By the time the chef found the TREE (3) waving the SIGN (9), he was driving a DENTY CHEF VAN (27).
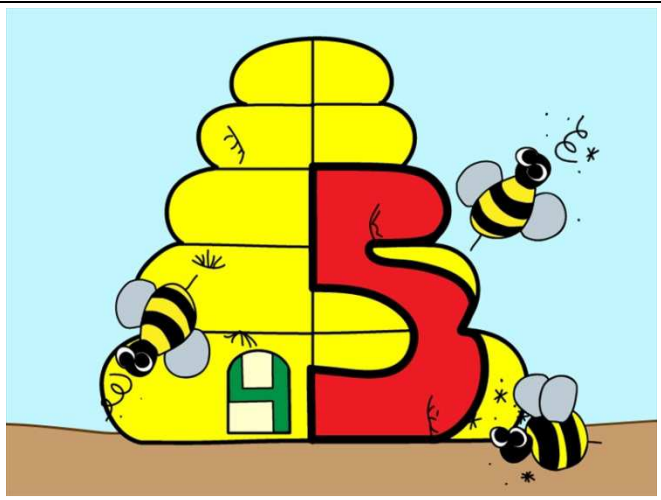
4 x 4 = 16

Door x Door = Sick Queen

A queen was invited to a queenly ball at a fancy hotel in a big city. When she arrived at the hotel, she was amazed to see doors that go around in a circle. The queen had never seen revolving doors. She pushed on the door. "Whoopee!" she yelled as she went around and around. When the dizzy queen finally stepped out from between one DOOR (4) and the other DOOR (4), she was a very SICK QUEEN (16).
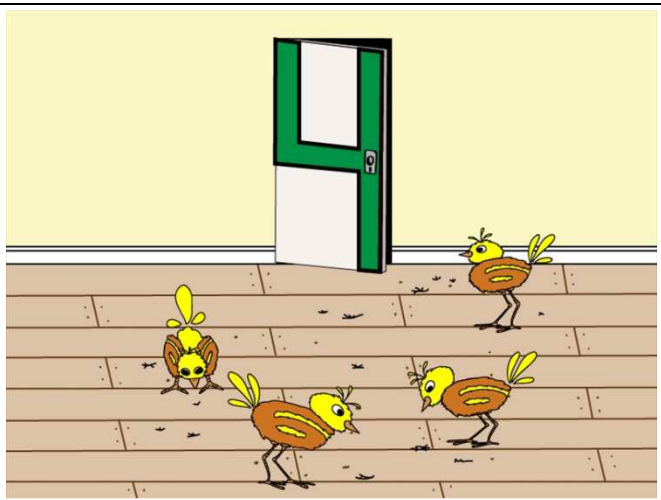
4 x 5 = 20

Door x Hive = Denty

Once there was a busy little bee hive. Every day hundreds of worker bees flew in and out with pollen to make honey. One day, the wind blew the door to the hive shut. When the worker bees tried to get into the hive, they flew into the side of the hive and made tiny dents. When the DOOR (4) to the HIVE (5) was shut, the bees made it DENTY (20).
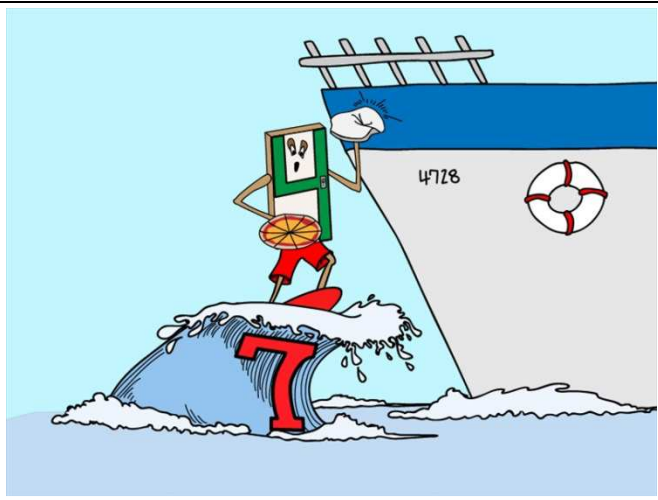
4 x 6 = 24

Door x Chicks = Denty Floor

One winter day on the farm, the ground was covered with snow. The hungry chicks could not find food. When the farmer accidentally left the door to the house open, the chicks hopped inside. As they pecked at the crumbs on the floor, their beaks made tiny dents. When the CHICKS (6) hopped through the DOOR (4), they made a DENTY FLOOR (24).
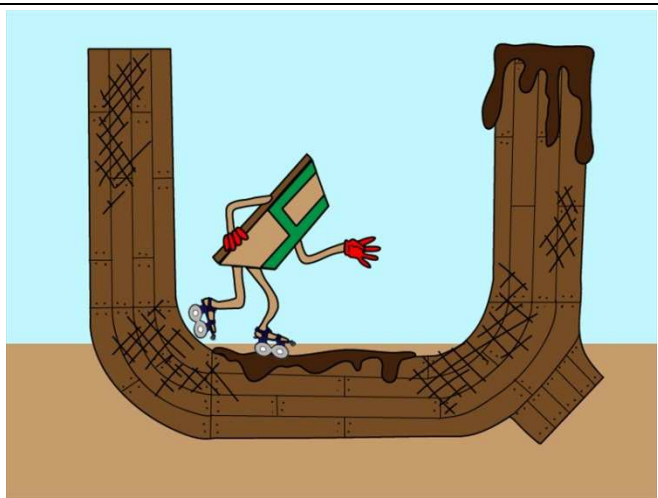
4 x 7 = 28

Door x Surfin = Denty Plate

Once there was a door who lived by the ocean and loved to surf. One day, he found the perfect job delivering pizzas to the boats on the waterfront. When an order for pizza came in, he would surf the waves and deliver the pizza on a shiny, metal plate. When he arrived at the boats, he often had trouble stopping. Time after time, he hit the sides of the boats and dented his pizza plate. While delivering pizzas, the SURFIN (7) DOOR (4) made a DENTY PLATE (28).
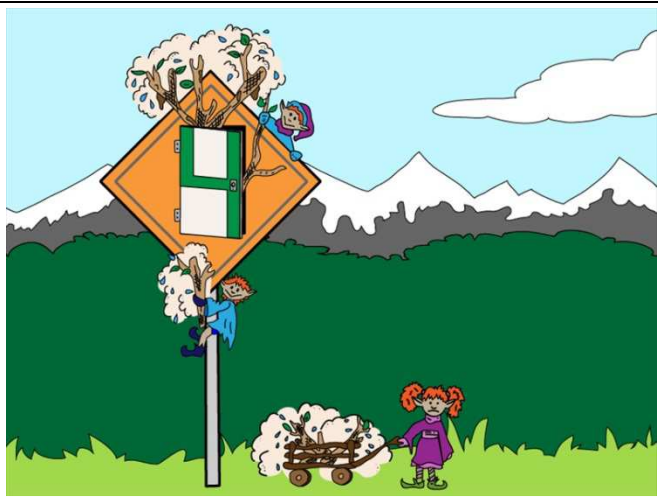
4 x 8 = 32

Door x Skate = Dirty U

One day, a door was skating by an old pile of dirty wood when he had a great idea. He took the dirty wood and built a huge ramp shaped like a U. The door called his ramp the dirty U because it was made of dirty wood. He loved skating up and down the sides of the U. The DOOR (4) loved to SKATE (8) and perform fancy tricks on the DIRTY "U" (32).
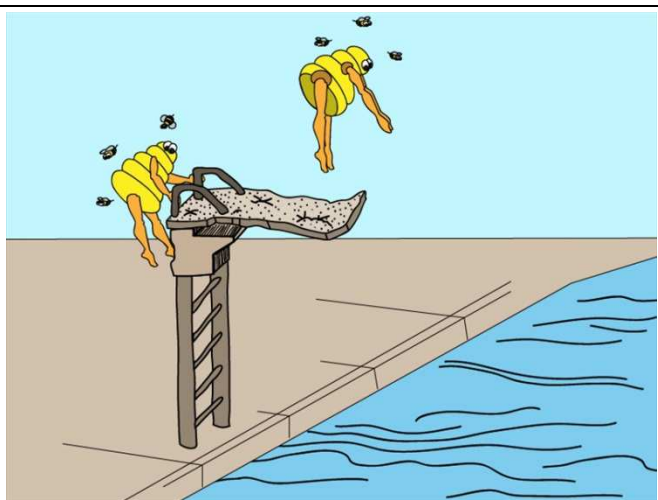
4 x 9 = 36

Door x Sign = Dirty Sticks

On a narrow road high in the mountains, there was a sign who liked to help his small mountain friends. Every day, logging trucks drove down the road and sticks would drop off into the dirt. Each evening, the sign would gather up the dirty sticks and hide them behind his secret door. At night, when the trucks were gone, his little mountain friends would open the secret DOOR (4) on the SIGN (9) and gather the DIRTY STICKS (36) to take home.
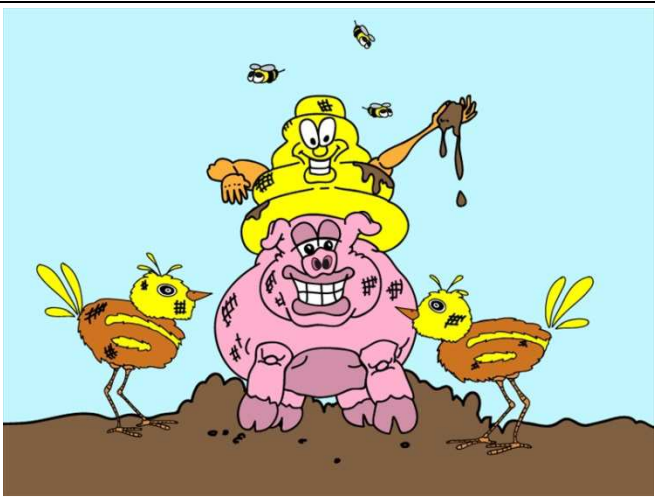
5 x 5 = 25

Hive x Hive = Denty Dive

One hot afternoon, two heavy bee hives went to a swimming pool to cool off. They had a great time splashing in the pool and bouncing on the diving board. They bounced on the board so hard they made big dents. One HIVE (5) and the other HIVE (5) called it the DENTY DIVE (25).

5 x 6 = 30

Hive x Chicks = Dirty

Once there was a beehive who was best friends with two little chicks. One hot day on the farm they saw a pig rolling in the wet, mushy mud. "Whoopee!" they yelled and jumped into the cool, squishy mud. The HIVE (5) and the CHICKS (6) became very, very DIRTY (30).
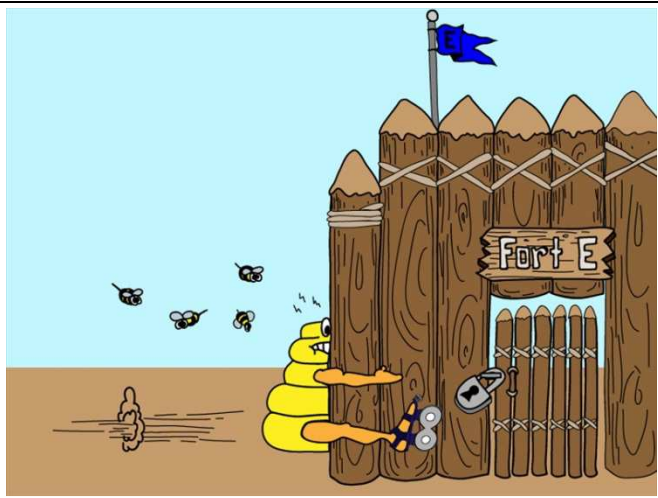
5 x 7 = 35

Hive x Surfin = Dirty Dive

Once there was a beehive who loved to surf. He was afraid of getting hurt on the rocky beaches and the sandy beaches were too hot for his feet. The hive found the perfect solution – muddy beaches! The hive loved to surf up to the beach and dive into the mud. The hive got very dirty! The SURFIN (7) HIVE (5) loved doing a DIRTY DIVE (35).
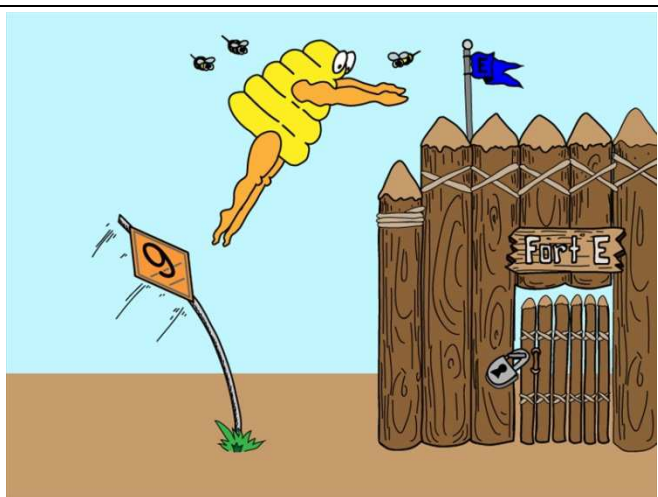
5 x 8 = 40

Hive x Skate = Fort E

Fort E was built to look like forts of long ago. Visitors would come from all around to see Fort E. One summer day, a beehive put on his skates and went racing down the street to Fort E. The people inside Fort E saw the hive zooming toward them on skates. They were worried that the bees from the hive would scare away the visitors, so they quickly shut the gates. The HIVE (5) on SKATES (8) smashed into FORT E (40).
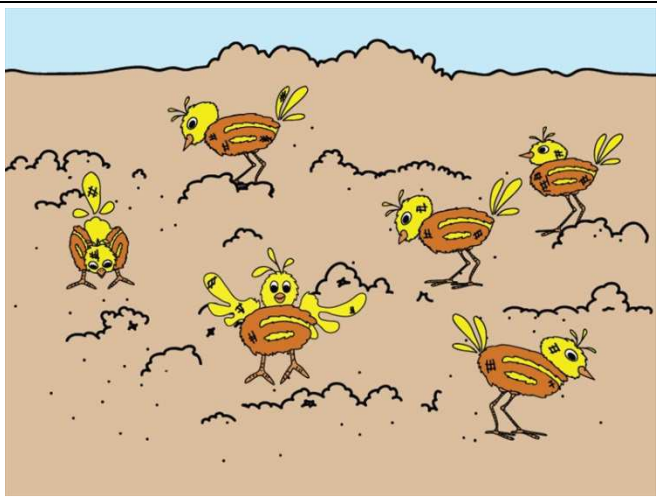
5 x 9 = 45

Hive x Sign = Fort E Dive

Once there was a beehive who dreamed of visiting Fort E. The hive thought and thought and finally came up with a funny way of getting into Fort E. He jumped onto the face of a nearby sign. The sign bent backward and then sprang forward. The hive zoomed into the air and dove over the high wall of Fort E.   The people in the fort were amazed the HIVE (5) could use a SIGN (9) to do a FORT E DIVE (45).
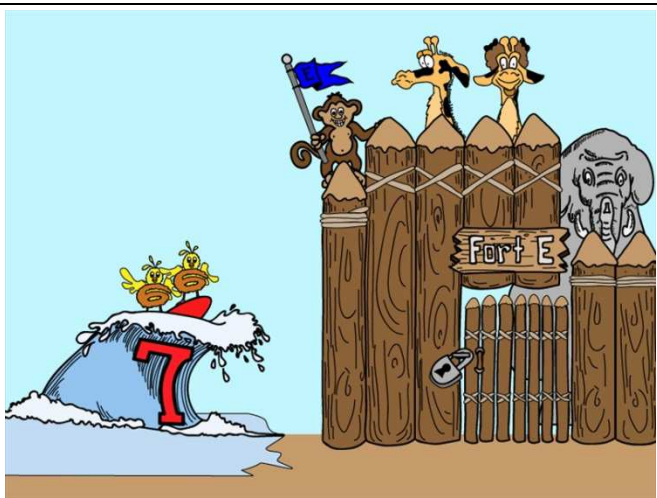
6 x 6 = 36

Chicks x Chicks = Dirty Chicks

Once there were chicks who hated to take baths. When their mother called them for bath time, the chicks would run and hide! As the days passed, the chicks became dirtier and dirtier. Soon, everyone on the farm heard about those dirty chicks. The people shook their heads and said, "CHICKS (6), CHICKS (6), DIRTY CHICKS (36)."
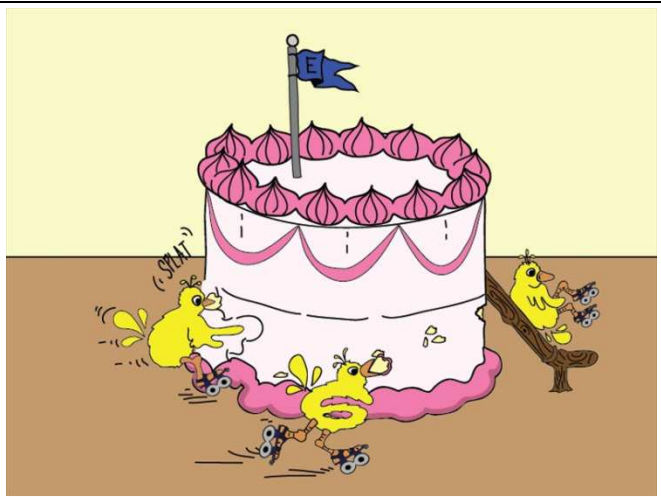
6 x 7 = 42

Chicks x Surfin = Fort E Zoo

One day a mother hen thought of a way to trick her dirty chicks into taking baths. The mother hen taught the chicks how to surf. The chicks loved surfing! One day, the chicks decided to surf over to nearby Fort E. As they surfed closer, the chicks became very excited to see animals from a traveling zoo. The SURFIN (7) CHICKS (6) could hardly wait to see the FORT E ZOO (42).
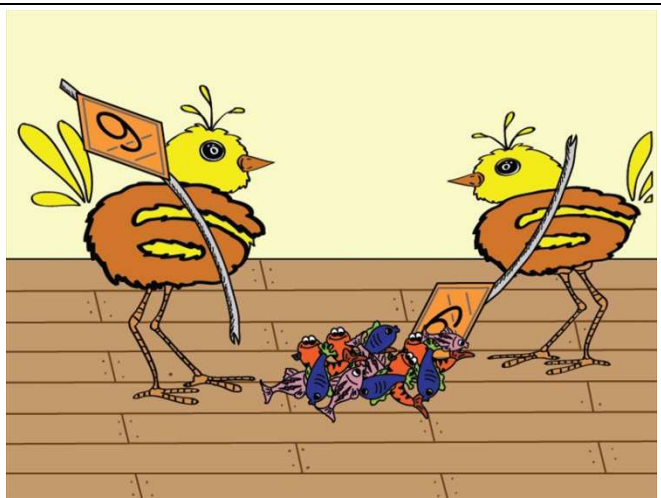
6 x 8 = 48

Chicks x Skate = Fort E Cake

When the chicks returned to the farm from their visit to Fort E, they found a cake decorated just like the fort. One of the chicks thought of a fun way to eat the Fort E cake. They would eat the cake while roller skating! When some of the CHICKS (6) tried to SKATE (8), they crashed right into the side of the FORT E CAKE (48). Splat!

6 x 9 = 54

Chicks x Sign = Fishy Floor

Two young chicks loved to fish. One lucky day, they caught fish, fish, and more fish. When the chicks arrived home that evening, they were very tired so they just dumped the fish on the floor and went straight to bed. The next morning, their mom told them to get those stinky fish off the floor. The chicks did not want to touch the stinky fish, so they found an old sign to scoop up the fish. The clever CHICKS (6) used an old SIGN (9) to clean the FISHY FLOOR (54).
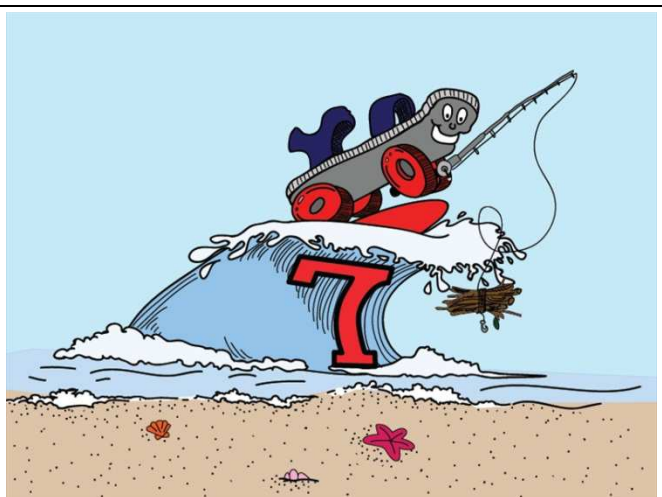
7 x 7 = 49

Surfin x Surfin = Fort E Twine

The people living in Fort E decided to try and get into the Book of World Records so they would be famous. They had extra twine from tying all the logs of Fort E together, so the people decided to make the world's largest ball of twine. They began wrapping the twine into a ball. The ball grew bigger and bigger! Soon the ball was so big that surfers could see it over the top of the fort walls. People SURFIN (7) on one side of the fort and people SURFIN (7) on the other side were surprised to see the FORT E TWINE (49)!
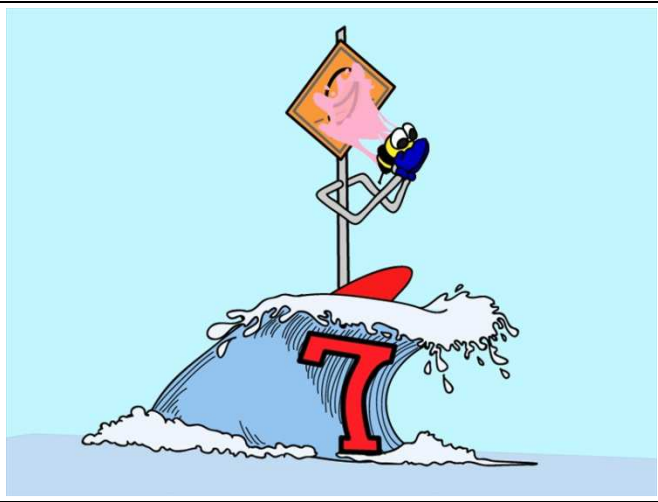
7 x 8 = 56

Surfin x Skate = Fishy Sticks

Once there was a roller skate who loved to surf. As he surfed, he noticed lots of fishy smelling sticks floating in the water. He was worried about other surfers crashing into the sticks. So, the skate used a fishing pole and hook to snag the sticks. While SURFIN (7), the SKATE (8) caught FISHY STICKS (56).

7 x 9 = 63

Surfin x Sign = Sticky Bee

There was a sign who loved to surf. One day, something interesting happened. A bee covered with sticky honey was buzzing along enjoying the warm summer day when . . . THUD! The bee flew right into the sign. Neither were hurt, but the bee was stuck to the sign. The sign pulled and pulled trying to free the bee. Finally, the SURFIN (7) SIGN (9) pulled the STICKY BEE (63) off.
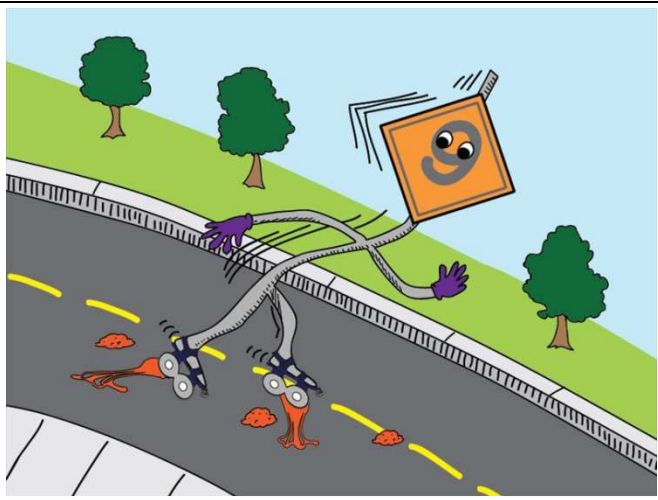
8 x 8 = 64

Skate x Skate = Sticky Floor

One day, a brother and sister visited a skating rink. They put on their skates and started skating. Suddenly, they stopped moving. They looked down and were surprised to see the floor covered with sticky, gooey gum. He couldn't SKATE (8) and she couldn't SKATE (8) because of the STICKY FLOOR (64).

8 x 9 = 72

Skate x Sign = Suddenly Goo

Once there was a sign that loved to skate fast. Sometimes he skated so fast his wheels became red hot. One day, as he was skating down a huge hill, his wheels became so hot they melted! The SIGN (9) looked at each SKATE (8) and realized the wheels were SUDDENLY GOO (72).

9 x 9 = 81

Sign x Sign = Ate a Ton

There was a giant who loved to eat. He had to eat a ton of food to feel full. Eating a ton of food took too long using a regular fork or spoon. One day he had a great idea. He could use signs for spoons! With a SIGN (9) in one hand, and a SIGN (9) in the other hand, the giant quickly ATE A TON (81).