

Math Challenge #3



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|-------------------|-----------------------|--------------|
| First Name: _____ | Last Name: _____ | Grade: _____ |
| Teacher: _____ | Parent's email: _____ | |




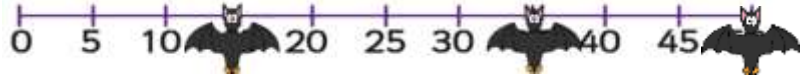
Happy Halloween!

Welcome to the Math Challenge #3. This set of Math Challenge problems are all about things at Halloween (trick-or-treating, costumes parties, carving pumpkins and haunted houses). Many of the problems can be solved by drawing a picture/diagram/model and/or using logical reasoning.

If you are new to any of the problem solving strategies, check out our complete overview of elementary problem solving strategies at <https://www.mathinaction.org/problem-solving-strategies.html>.

Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 7 problems.
Fourth Grade and above: solve at least 12 problems.

Answer

| | |
|--|---|
| 1. While trick-or-treating, Mia got 6 candies. Joel got 3 candies, and Dan got 2 more candies than Joel. How many candies did they get altogether? | |
| 2. Eliza has a sheet of halloween stickers (below). Which sticker does she have the most of? <div style="text-align: center; margin: 10px 0;">  </div> | |
| 3. Laura wants to make her own Halloween costume. She will put a total of 12 flowers on her skirt. If there are already 3 flowers on it, how many more flowers does she need to put on her skirt? |  |
| 4. The store has 15 pumpkins left to sell. Ella's family is getting 3 pumpkins and Mike's family is buying 4 pumpkins to carve. How many pumpkins are left at the store? |  |
| 5. What is the sum of the numbers hiding under the bats? <div style="text-align: center; margin: 10px 0;">  </div> | |

6. An adult skeleton has 206 bones. There are 27 bones in each hand and 26 bones in each foot. How many bones are not in the hands and feet?



7. Which of the three numbers below can you multiply together to get 24?



8. Each Halloween object in the puzzle below is worth a different value from 1 to 4. Use the row totals to work out the value of each object.

| | | | | |
|--|--|--|--|------|
| | | | | = 11 |
| | | | | = 8 |
| | | | | = 6 |
| | | | | = 8 |



9. There are ghosts in the haunted house. There are more than the number of days in October. There are less than the product of 7 and 5. The number of ghosts is an odd number. How many ghosts are in the haunted house?

10. What is the sum of the mixed numbers under the two pumpkins?

































11. Each year, for trick or treating in your town, there are twice as many houses as the year before. This year there are only 8 houses. In how many years will there be over 1,000 houses?

12. Each Halloween object in the puzzle below is worth a different value of any number from 1 to 7. Use the row totals to find the value of each object.

| | | | | |
|--|--|--|--|------|
| | | | | = 24 |
| | | | | = 26 |
| | | | | = 20 |
| | | | | = 23 |



| | |
|---|---|
| <p>13. Nate couldn't remember exactly how many cupcakes Hema and Vicky made for the Halloween party, but he did remember that altogether, Hema, Vicky and he had made 156 cupcakes. He also remembered that he and Hema had made 110 cupcakes and he and Vicky had made 94 cupcakes. How many did each person make?</p> | <p><i>Nate =</i></p> <p><i>Hema =</i></p> <p><i>Vicky =</i></p> |
| <p>14. Each Halloween object in the puzzle below is worth a different value of any number from 0 to 9. Use the clues to find the value of each object.</p> <p>  ÷  =   -  = 4  +  =  ×   = 16 =  ×   =  ÷   +  =   ×  = 56 </p> |  =  =  =  =  =  =  =  =  =  = |
| <p>15. Meera brought her sister to four streets for Halloween. Each street had an average of 26 houses. Two of the streets had 28 houses and one of the streets had 21 houses. How many houses were on the fourth street?</p> | |
| <p>16. For the skeleton dance, Gamora needed to make a playlist of songs. Each song was about three and a quarter minute long. He needed a playlist that lasted four hours and thirty minutes. How many songs does he need?</p> | |
| <p>17. You just put on your new Halloween costume. You and your friends are going trick or treating. At the first house you get 5 pieces of candy, at the second house, you get 10, and at the third house, you get 15. The pattern continues for all 12 houses on your street that you visit. If you eat 2 pieces of candy between each house, how many would you have after visiting all 12 houses?</p> | |
| <p>18. Each year, I trick or treat on a rectangular block in my town. The length of one side of the block is two times the length of the other side. If the perimeter of the entire block is 564 yards, how long is each side?</p> | |

Solution is available on November 4, 2022

www.mathinaction.org



Student Registration for [Fall 2022 Math Challenge Tournament](#) opens on October 17, 2022.