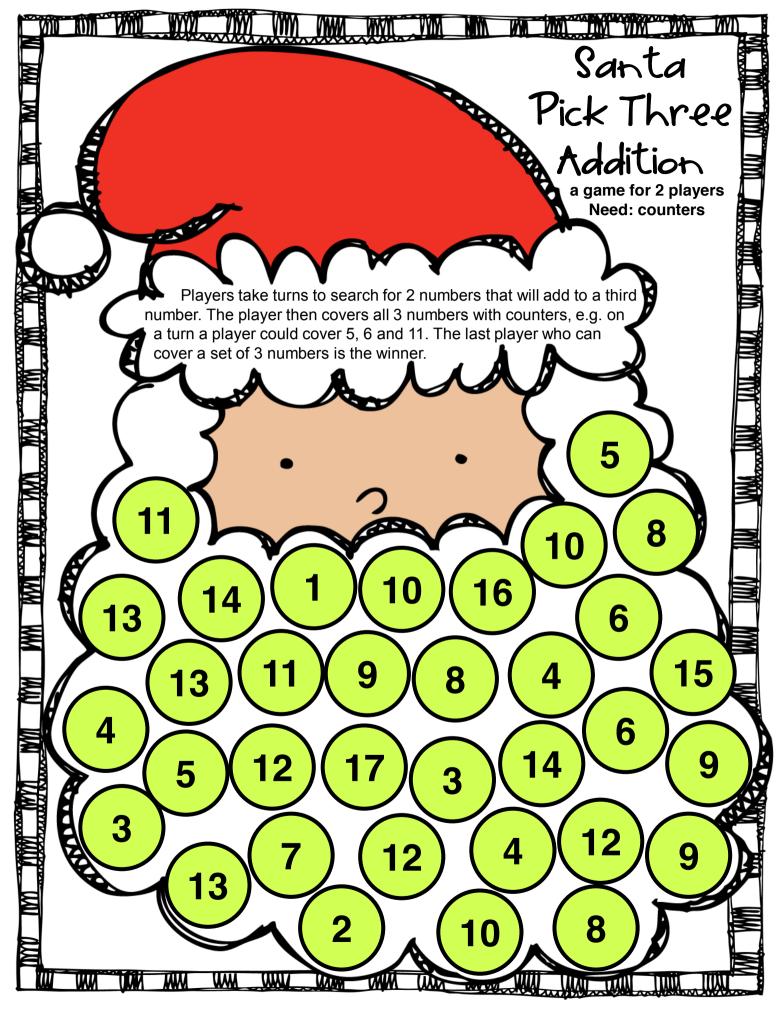
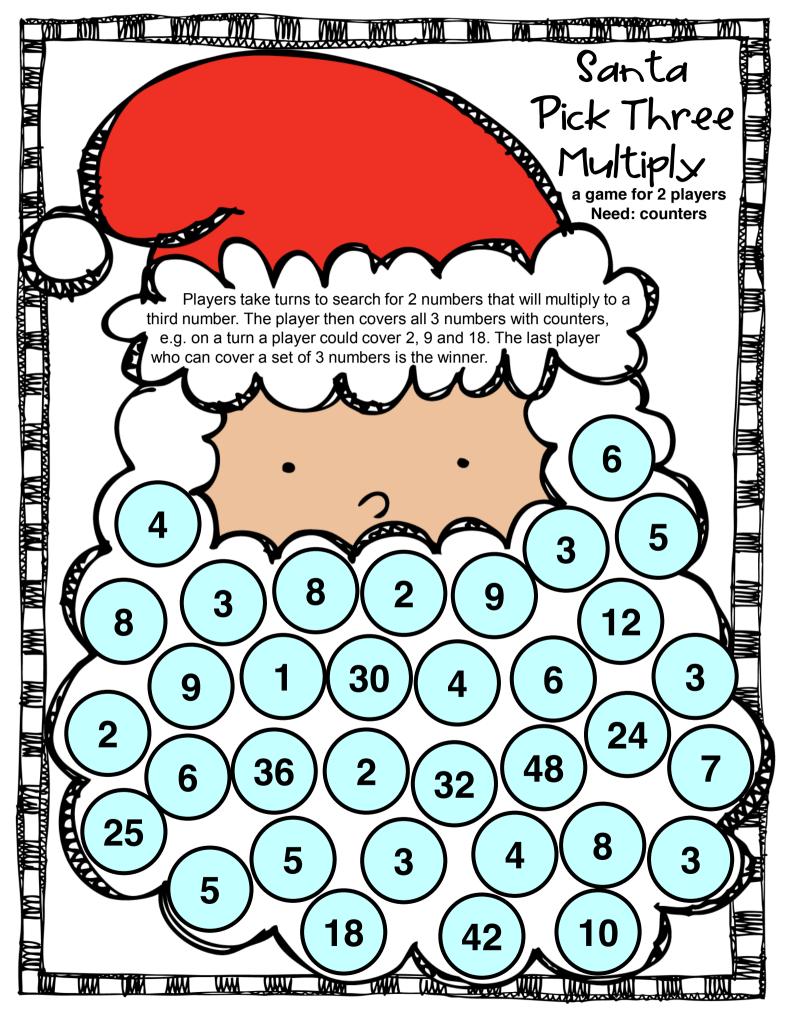


| START                   | 8  | 6                               | 10  | 13   | 15                       |  |  |  |
|-------------------------|--|---------------------------------|---|--|--------------------------|--|--|--|
| Elf Friends Odd or Even |  |                                 |   |  |                          |  |  |  |
| 34                      | 30   | 25                              | 23°   | 21   | 18                       |  |  |  |
| 35                      | and add the n<br>moves to the                          | outs a counter of umbers togeth | ame for 2-4 place on the Start. Place on the Start. Place of the total is sen number. | ayers take turn<br>s an odd numb   | er the player            |  |  |  |
| 39                      | 40   | 41 *                            | 48  | 49   | 55                       |  |  |  |
| hey would me            | If a player rolls<br>ove to 13 beca<br>the first odd n | use 4 and 3 m                   |   |  | 57                       |  |  |  |
| 72                      | 70   | 68                              | 64  | 61   | 59                       |  |  |  |
| 74                      |  |                                 | first player to r<br>To lan   | an elf, take the<br>each the Finish<br>d on the FINIS<br>roll an odd nui | n is the winner<br>H you |  |  |  |
|                         |  | 84                              |   | <b>A</b>   | FINISH                   |  |  |  |

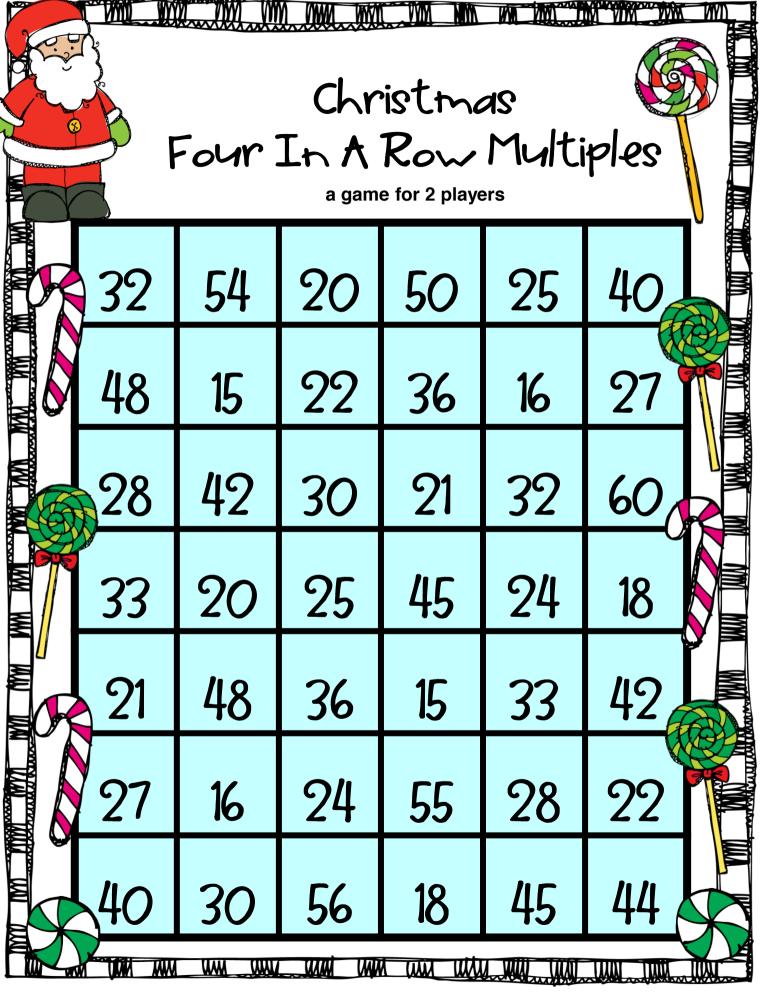
|              |   | **   |   |  |  |   |
|--------------|---|--|---|--|--|---|
| START        | 4   | 6  | 8   | 10   | 12   |   |
| Elf          | Frie  | nds 1  | Doub  | 62   | 14   |   |
| 4            | 24  | 22   | 20  | 18   | 16   |   |
| 6            | and add the n                                     |  |   |  |  |   |
| 8            | 10  | 12   | 14  | 16   | 18   |   |
| they would m | ove to 14. If yo                                  | ou land on an e  | If take the   |  | 20   |   |
| 10           | 8   | 6  | 4   | 24   | 22   |   |
| 12           |   | ,  |   |  |  |   |
| 14           | 16  | 18   | 20  | 22   | FINISH<br>12 16/   |   |
|              | Elf 4 6 8 For Example: they would m shortcut. The | Elf Frie<br>4 24<br>6 Each player pand add the moves to the<br>8 10<br>For Example: If a player throthey would move to 14. If you shortcut. The first player to 12 | Elf Friends 1 4 24 22 6 Each player puts a counter of and add the number togethe moves to the next square with they would move to 14. If you land on an eshortcut. The first player to reach the Finis  10 8 6 12 | Elf Friends Doub  4 24 22 20  6 Each player puts a counter on the Start. Pland add the number together. The player the moves to the next square with that double.  8 10 12 14  For Example: If a player throws 4 and 3 which add to 7, they would move to 14. If you land on an elf take the shortcut. The first player to reach the Finish is the winner.  10 8 6 4  To lan must roll a total shorts a specific product of the shorts and the shorts are shorted. | Elf Friends Doubles  4 24 22 20 818  6 a game for 2-4 players Each player puts a counter on the Start. Players take turn and add the number together. The player then doubles thimoves to the next square with that double.  8 10 12 4 16  For Example: If a player throws 4 and 3 which add to 7, they would move to 14. If you land on an elf take the shortcut. The first player to reach the Finish is the winner.  10 8 6 4 24  To land on the FINIS must roll a total of 6 or 8 to 9 12 or 16. | Elf Friends Doubles  4 24 22 20 8 16  6 agame for 2-4 players Each player puts a counter on the Start. Players take turns to roll 2 dice and add the number together. The player then doubles this number and moves to the next square with that double.  8 10 12 14 16 18  For Example: If a player throws 4 and 3 which add to 7, they would move to 14. If you land on an elf take the shortcut. The first player to reach the Finish is the winner.  10 8 6 4 24 22  To land on the FINISH you must roll a total of 6 or 8 to get a double of 12 or 16. |







#### Christmas Four In A Row Add 10 a game for 2 players



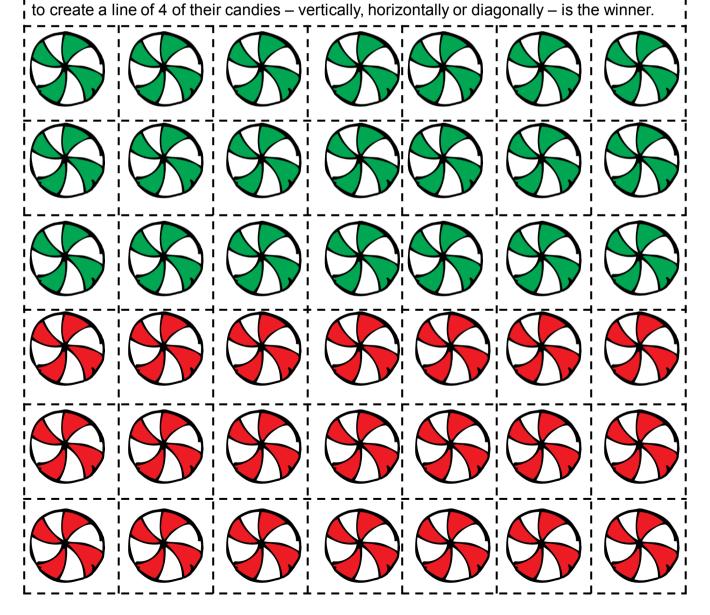
### Christmas Four In A Row Add 10

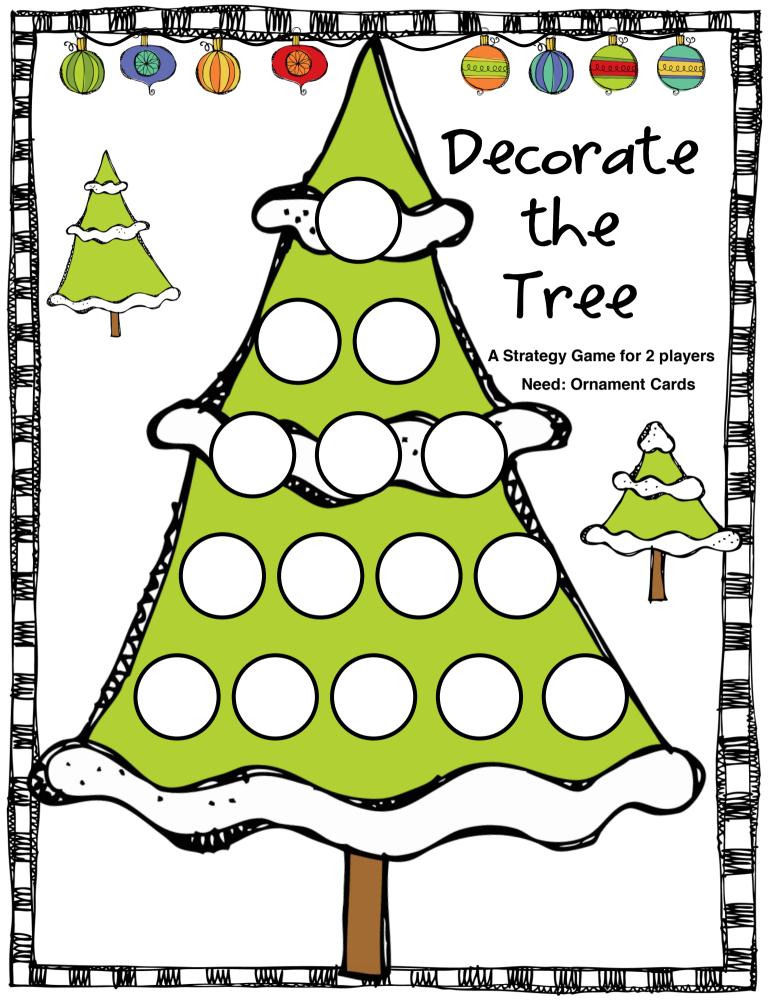
a game for 2 players Need: 2 dice, candy tokens (or counters)

Each player uses a different colored candy token. Players take turns to roll 2 dice, add the numbers together and then add 10 to the total. The player then covers this number on the board, e.g. if you roll 6 and 3, this adds to 9 so you cover 19. If the number isn't available you don't cover a number on that turn. The first player to create a line of 4 of their candies – vertically, horizontally or diagonally – is the winner.

## Christmas Four In A Row Multiples

a game for 2 players Need: 2 dice, candy tokens (or counters)
Each player uses a different colored candy token. Players take turns to roll 2 dice,
add the numbers and cover any number on the board that is a multiple of this
number, e.g. if you roll 6 and 3, this adds to 9 so you can cover 18, 27, 36, 45 or 54.
If the number isn't available you don't cover a number on that turn. The first player





#### Decorate the Tree



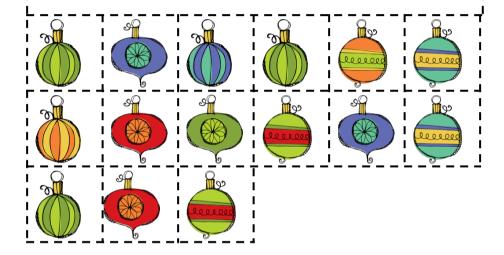


Players take turns to decorate the tree by covering a circle with an ornament. On each turn a player can cover as many circles in a row as they choose.

For example, on the bottom row a player could cover 1, 2, 3, 4 or 5 circles.

You can only cover circles from one row in each turn.

The player who covers the last circle on the tree with an ornament is the winner.



## Christmas Math Puzzles



## Find Four Set A



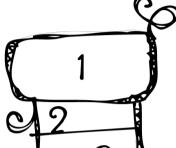
Find 4 numbers on the stocking that add to each number.

Each number can only be used once on a line. The first one is done to show you

what to do.



<u>1, 2, 3, 5</u>

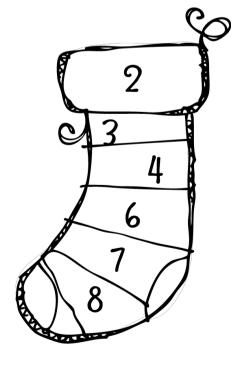


<u>a. 12</u>



<u>d. 15</u>

F. 19





## Find Four Set B



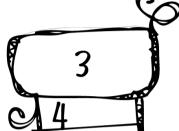
Find 4 numbers on the stocking that add to each number.

Each number can only be used once on a line. The first one is done to show you

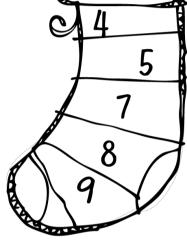
what to do.



<u>3, 4, 5, 7</u>

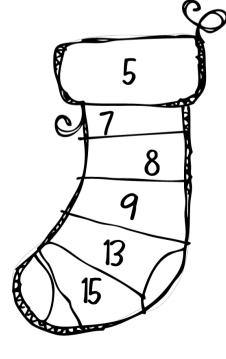


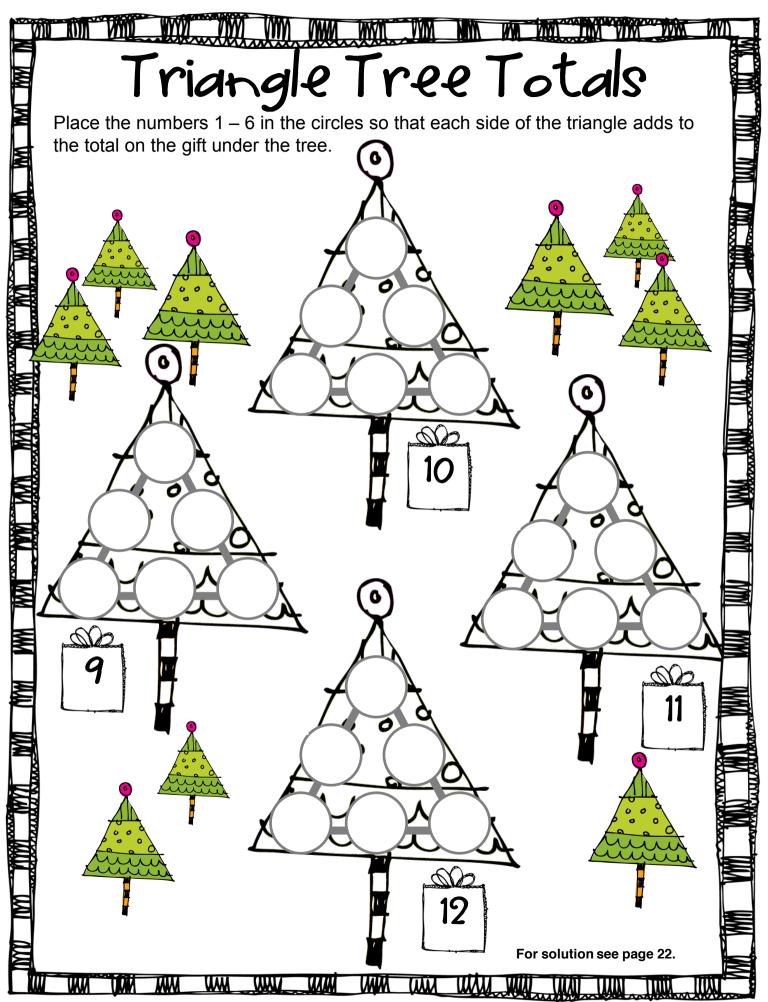
<u>а. 20</u> <u>b. 23</u> c. 28\_

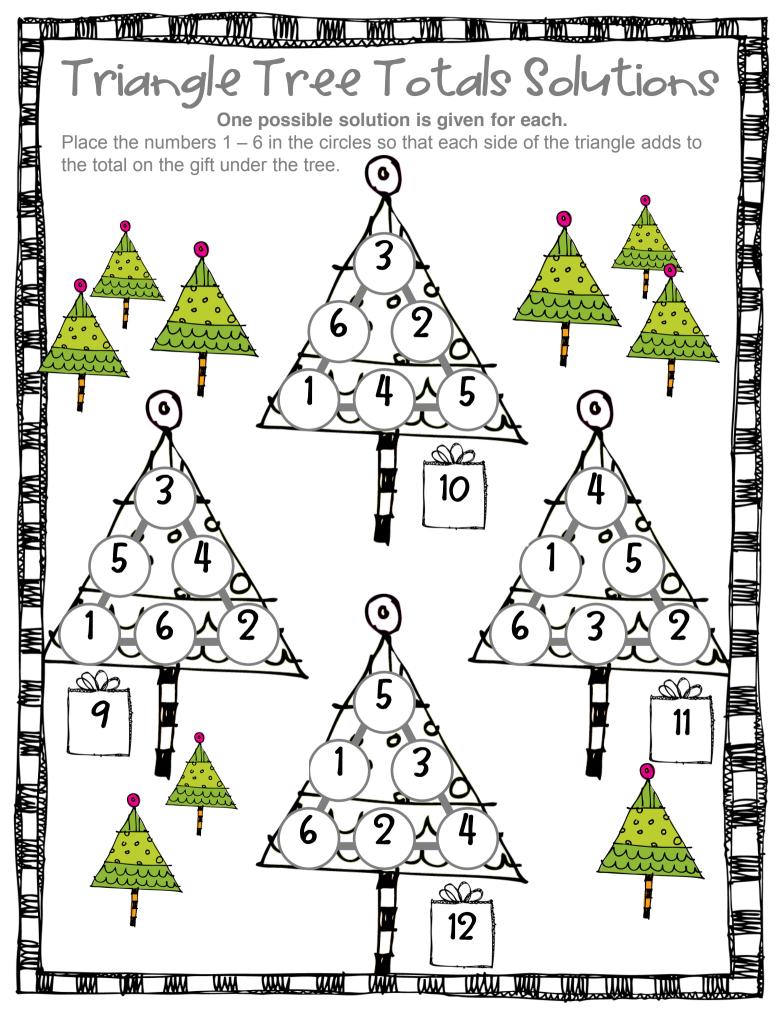


e. 34

f. 37







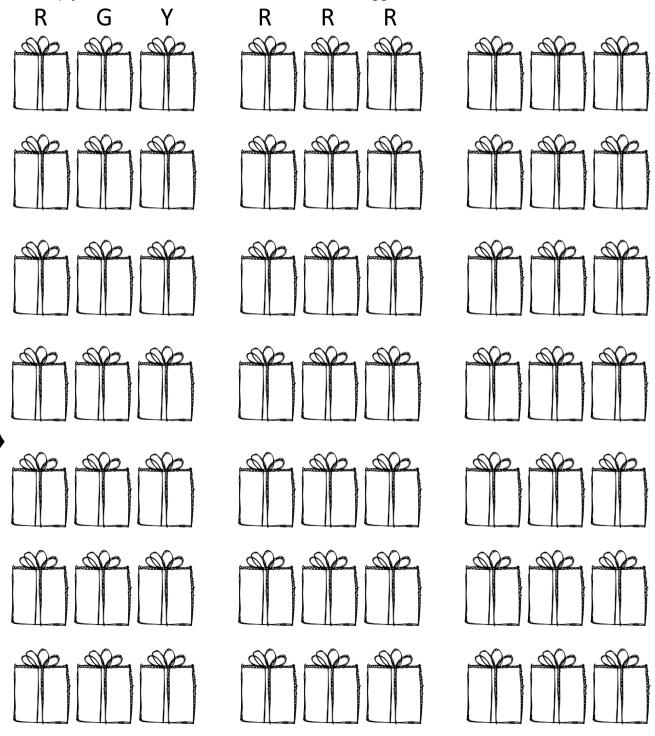
## Three Gifts



I have to wrap 3 gifts. I have red, green, yellow and blue paper.

How many different combinations of colors can I use to wrap the 3 gifts? Color the gifts below to show the different combinations that I could use. You can use a color more than once but don't use the same colors in a different order.

To help you start the first 2 sets have the colors suggested with the first letter of the color.



## 12 Days of Christmas - Add to 12



I can add to 12. Find adjoining pairs of numbers that add to 12. Circle each pair. Each pair must be side by side or one above the other.

| 4 | 4  | 6 | 8  | 7 | 2  | 6 | 1  | 11 | 1  | 4 | 5 | 10 |
|---|----|---|----|---|----|---|----|----|----|---|---|----|
| 3 | 8  | 1 | 11 | 5 | 10 | 6 | 3  | 6  | 11 | 8 | 4 | 8  |
| 2 | 10 | 6 | 6  | 4 | 8  | 4 | 2  | 10 | 2  | 9 | 3 | 1  |
| 3 | 3  | 1 | 11 | 8 | 9  | 3 | 10 | 4  | 5  | 6 | 7 | 11 |
| 5 | 9  | 7 | 1  | 3 | 7  | 5 | 2  | 8  | 4  | 8 | 5 | 8  |
| 5 | 7  | 5 | 9  | 3 | 3  | 9 | 1  | 11 | 4  | 7 | 5 | 10 |
| 9 | 2  | 7 | 5  | 9 | 4  | 3 | 8  | 4  | 6  | 6 | 7 | 2  |

#### Plax the 12 Daxs of Christmas Game With a Friend



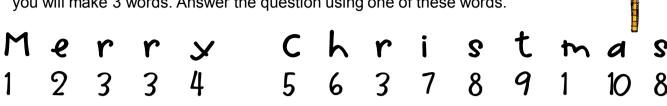
On a new copy of this sheet – take turns to circle a pair that adds to 12. The last player who can circle a pair is the winner.

Twelve Drummers Drumming...

## Merry Christmas

Each letter has a value.

Work out the answer for each fact. Write the letter for the answer below it and you will make 3 words. Answer the question using one of these words.



Which of these would you like to receive as a gift? A toy \_\_\_\_\_

Which of these would you like to eat on Christmas day?

Which of these would you like to have on top of the Christmas tree?

## Merry Christmas Solutions

Each letter has a value.

Work out the answer for each fact. Write the letter for the answer below it and you will make 3 words. Answer the guestion using one of these words.



Which of these would you like to receive as a gift? A toy \_

Which of these would you like to eat on Christmas day?

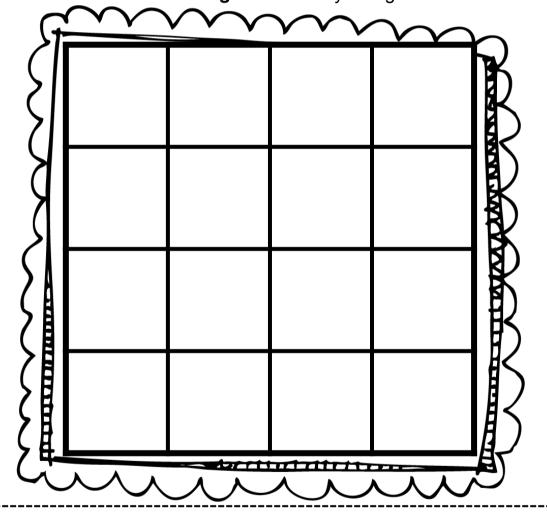
Which of these would you like to have on top of the Christmas tree?

# Four Gifts Three crosses have been placed in this 3x3 grid so that there is only one cross in each row and each column.

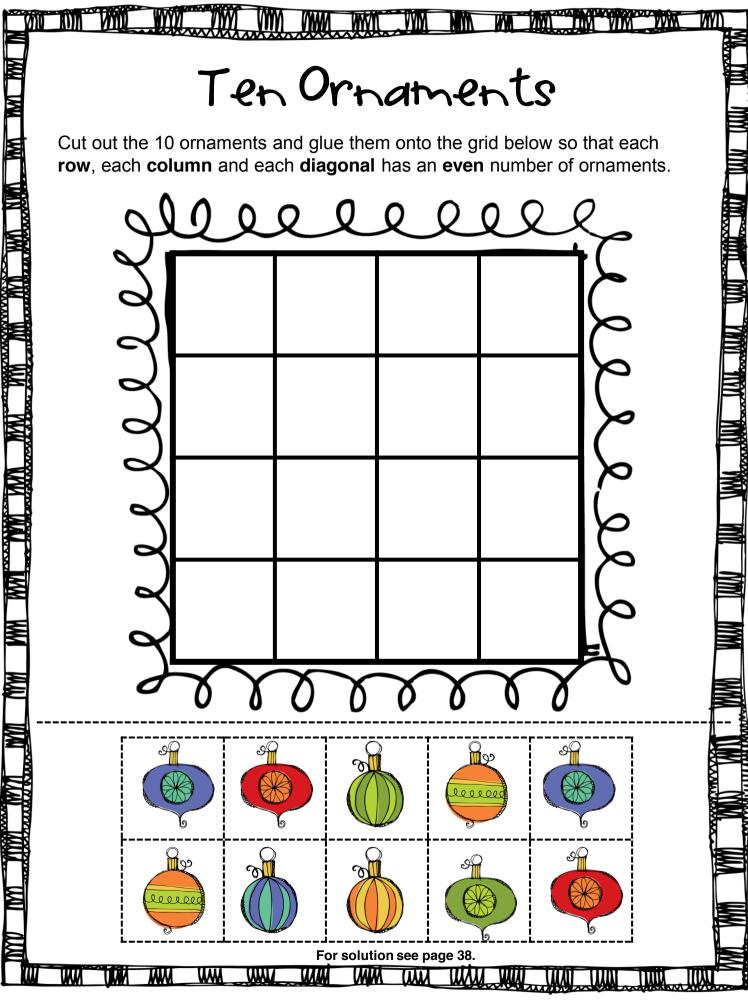


Can you cut out the gifts below and glue the 4 gifts onto this 4x4 grid so each **row**, each **column** and each **diagonal** has only one gift?

X







## Christmas Math Brain Teasers

#### Different Formats

Each Brain Teaser is presented in 2 different formats.

This allows the cards

to be used in three different ways.

Large Card size with 2 to a page.

Mini Card size with 6 to a page.

Worksheet – the mini cards with 6 to a page can also be used as a worksheet. Just print one for each student.



## 1. Elves and Reindeer

The elves and reindeer are getting ready for a meeting with Santa.

14 of them have arrived.

If they have 38 legs between them, how many reindeer are at the meeting and how many elves are at the meeting?



## 2. Santa's Elves

Each elf can wrap 1 gift in one minute.

How many gifts can 5 elves wrap in three minutes?



## 3. Christmas Cards

MYM

Four friends, Tom, Lisa, Braydon and Peta give each other Christmas Cards.

MAN MAN NAM MAN MAN

If each one of them gives out a card to each of their friends, how many Christmas Cards are given out altogether?

How many cards would be given out if 7 friends each give each other Christmas cards?

## 4. Gift Wrapping

MM

Jenni and Marcus are wrapping Christmas gifts.

Jenni has wrapped 5 more than Marcus.

Together they have wrapped 17 gifts.

How many gifts has Marcus wrapped?



## Decorations

MM

W

Henry and Liza are decorating the Christmas tree.

Henry took half of the decorations out of the box and put them on the tree. Liza took half of the remaining

decorations and put them on the tree.

Then there were 3 decorations left.

How many decorations were in the box to begin?

## Snow Friends

MM

MM

The Snowmen and Snowwomen are comparing their heights.

Frosty, Snow White, Jack Frost and Snow Flake are lining up in

order from shortest to tallest.

Frosty is not the tallest or the shortest.

Snow White is taller than Jack Frost and Snow Flake.

Jack Frost is shorter than Frosty.

Jack Frost is not the shortest.

In what order are they standing?



## 7. Santa's Favorite Number

MM MM MM MM MM

Santa has a favorite number.

NYYTI (YYYY)

It is larger than 18 and smaller than 37.

The sum of the digits is 7.

It is an odd number.

What is Santa's favorite number?



## 8. Christmas Gifts

Carla is getting 2 gifts from her brother Harry. She has asked for a teddy bear, ball, doll or book.

How many different combinations could Harry give her, e.g. a ball and doll would be one combination?



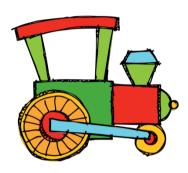


## 9. Uncle Tom's Gifts

Uncle Tom has a gift for his nephews and niece. Steven, Tracy and Paul are getting a train, a bear and a kite.

Steven isn't getting a bear or a train. Paul isn't getting a train.

What gift does Uncle Tom have for each?



## 10. Busy Elves

The elves have made 18 gifts today.

Some of them are teddy bears and some are trains.

If there are 2 teddies for every train, how many teddy bears

have they made today?



## 11. Candy Canes

How many candy canes do I have?

I have more than 15 but less than 30.

If 2 people share them evenly, there will be 1 left over.

If 3 people share them evenly, there will be 2 left over.

If 4 people share them evenly, there will be 3 left over.

MM



## 12. Two Colors

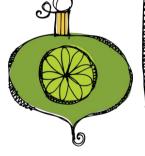
Tania is decorating her bedroom with Christmas decorations.

She is only going to use two different colored decorations.

She can choose from 6 colors - red, green, pink, orange, blue and silver.

How many different color combinations could she choose from? Example – red and green





#### Christmas Brain Teasers A

#### 1. Elves and Reindeer

The elves and reindeer are getting ready for a meeting with Santa.

14 of them have arrived.

If they have 38 legs between them, how many reindeer are at the meeting and how many elves are at the meeting?

#### 2. Santa's Elves

Each elf can wrap 1 gift in one minute. How many gifts can 5 elves wrap in three minutes?



#### 3. Christmas Cards

Four friends, Tom, Lisa, Braydon and Peta give each other Christmas Cards. If each one of them gives out a card to each of their friends, how many Christmas Cards are given out altogether?

How many cards would be given out if 7 friends each give each other Christmas cards?

#### 4. Gift Wrapping

Jenni and Marcus are wrapping Christmas gifts.

Jenni has wrapped 5 more than Marcus. Together they have wrapped 17 gifts.

How many gifts has Marcus wrapped?





#### 5. Decorations

Henry and Liza are decorating the Christmas tree.

Henry took half of the decorations out of the box and put them on the tree. Liza took half of the remaining decorations and put them on the tree. Then there were 3 decorations left. How many decorations were in the box to begin?

W

#### 6. Snow Friends

The Snowmen and Snowwomen are comparing their heights. Frosty, Snow White, Jack Frost and Snow Flake are lining up in order from shortest to tallest. Frosty is not the tallest or the shortest. Snow White is taller than Jack Frost and Snow Flake. Jack Frost is shorter than Frosty. Jack Frost is not the shortest. In what order are they standing?

#### Christmas Brain Teasers B

## 7. Santa's Favorite Number

Santa has a favorite number. It is larger than 18 and smaller than 37.

The sum of the digits is 7. It is an odd number.

What is Santa's favorite number?



#### Christmas Gifts 8.

Carla is getting 2 gifts from her brother Harry. She has asked for a teddy bear, ball, doll or book.

How many different combinations could Harry give her, e.g. a ball and doll would be one combination?





#### Uncle Tom's Gifts 9.

Uncle Tom has a gift for his nephews and niece. Steven, Tracy and Paul are getting a train, a bear and a kite. Steven isn't getting a bear or a train. Paul isn't getting a train.

What gift does Uncle Tom have for each?

#### Busy Elves 10.

The elves have made 18 gifts today. Some of them are teddy bears and some are trains.

If there are 2 teddies for every train, how many teddy bears have they made today?



#### Candy Canes

How many candy canes do I have? I have more than 15 but less than 30. If 2 people share them evenly, there will be 1 left over.

If 3 people share them evenly, there will be 2 left over.

WW

If 4 people share them evenly. there will be 3 left over.

#### Two Colors 12.

Tania is decorating her bedroom with Christmas decorations. She is only going to use two different colored decorations.

She can choose from 6 colors - red. green, pink, orange, blue and silver. How many different color combinations could she choose from?

Example – red and green

## Christmas Math Puzzle Solutions

#### Find Four Set A

One possible solution is given for each

- a. 12 1, 2, 3, 6
- b. 14 1, 2, 5, 6
- c. 16 1, 3, 5, 7
- d. 15 2, 3, 4, 6
- e. 17 2, 3, 4, 8
- f. 19 2, 3, 6, 8
- g. 20 2, 4, 6, 8

#### Find Four Set B

One possible solution is given for each

- a. 20 3, 4, 5, 8
- b. 23 3, 5, 7, 8
- c. 28 4, 7, 8, 9
- d. 29 5, 7, 8, 9
- e. 34 5, 7, 9, 13
- f. 37 7, 8, 9, 13
- g. 43 7, 8, 13, 15

#### Four Gifts

One possible solution is given

|   |   |   | x |
|---|---|---|---|
| X |   |   |   |
|   |   | Х |   |
|   | Х |   |   |

#### Ten Ornaments

One possible solution is given

| X | x | x | X |
|---|---|---|---|
| X | X |   |   |
| Х |   | Х |   |
| X |   |   | X |

#### Three Gifts

20 possible combinations

| RGY | RRR | RRB | YYR | BBG | GGY |
|-----|-----|-----|-----|-----|-----|
| RBY | GGG | RRG | YYG | BBY | GGB |
| RGB | BBB | RRY | YYB | BBR | GGR |
|     |     |     |     |     |     |

GBY YYY

## Brain Teaser Solutions

1. Elves and Reindeer

9 elves and 5 reindeer

2. Santa's Elves

15 gifts

3. Christmas Cards

12 cards, 7 friends - 42 cards

4. Gift Wrapping

Marcus – 6 gifts

5. Decorations

12 Decorations

6. Snow Friends

Snow Flake, Jack Frost, Frosty, Snow White

7 Santa's Favorite Number

25

8. Christmas Gifts

6 combinations

9. Uncle Tom's Gifts

Steven - kite, Tracy - train, Paul - bear

10. Busy Elves

12 Teddy bears

11. Candy Canes

23 candy canes

12. Two Colors

15 Color combinations