

Do these in ANY order you like! Go get 'em!

1. A retirement home is going to plant trees around a square pool that measures 50 feet on each side. The trees are 5 feet apart. How many trees do they need to plant? (A drawing will help!)

2. Find the sequence (pattern) and fill in the blanks. What is the pattern?

13, 31, 24, 42, 35, 53, _____, _____, 57, 75

3. You need to cut a wooden rod into 35 pieces. It takes 3 minutes to make one cut. How long does it take to complete the cuts?

4. How many rectangles are in the shape below? (Don't be fooled!)



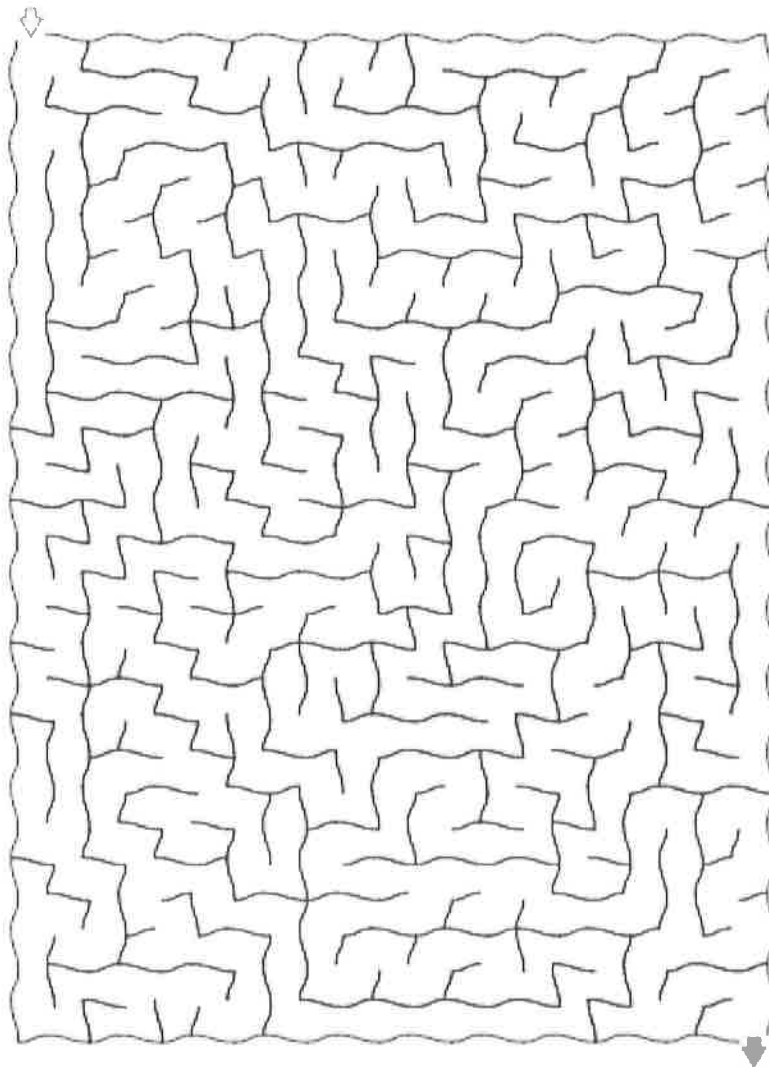
5. Add +, -, x or ÷ signs in the spaces to the left side of the "=" sign to make each equations work.

a) $1 \quad \underline{\quad} \quad 1 \quad \underline{\quad} \quad 3 \quad \underline{\quad} \quad 8 = 24$

b) $6 \quad \underline{\quad} \quad 5 \quad \underline{\quad} \quad 4 \quad \underline{\quad} \quad 6 = 24$

6. There are four (4) people at a party. If each person shook hands once with all the others, how many handshakes took place at the party? (Again, a drawing will help!)

7. Do the maze!



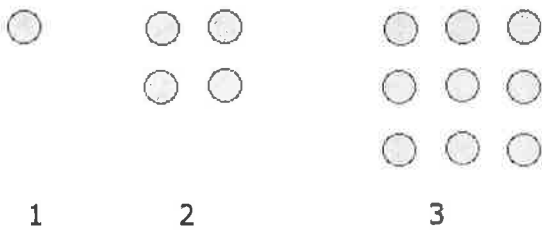
8. A book that Jessica wants costs \$22. Jessica saves \$3 a week. How many weeks does she have to save in order to have enough money to buy the book?

9. Thirty-nine fourth grade children line up in a row to get on a bus for a field trip. Jim Bob is the 18th from the front. Gertrude is the 32nd from the back. How many children are there between Jim Bob and Gertrude? (Maybe a list?)

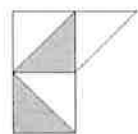
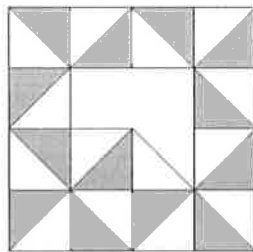
10. Inspect the following patterns:

a) How many circles should there be in the 4th group?

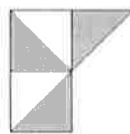
b) How many circles should there be in the 8th group?



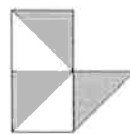
11. Which one of the small patterns below (A, B, C or D) fits in the large pattern?



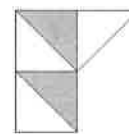
A



B



C



D

12. Sudoku! (soo dough' koo) - 1 through 9 in each row, each column & each square.

2		5			7			6
4			9	6			2	
				8			4	5
9	8			7	4			
5	7		8		2		6	9
			6	3			5	7
7	5			2				
	6			5	1			2
3			4			5		8

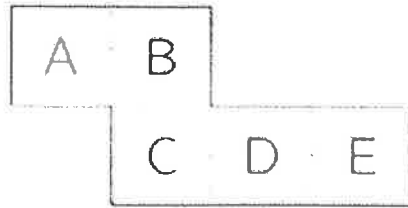
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13. Hidato! (hee dah' toe) – Consecutive numbers must touch on any side or corner.

	27		6	9		11
	25	28	8		10	13
24	22	19	29			14
	20		18	16	3	1
	38		31	17		
37	35	32		44	46	48
34	33		42		49	47

14. A digital clock shows 2:35. This is the first time after midnight when all three digits are different prime numbers. What is the last time before noon when all three digits on the clock are different prime numbers?

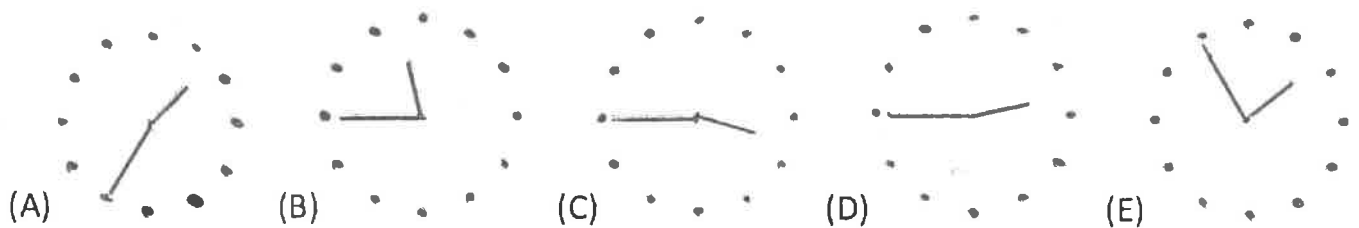
15. The piece of paper below is folded along the dotted lines to make an open box. The box is put on a table with the top open. Which letter is at the bottom of the box?



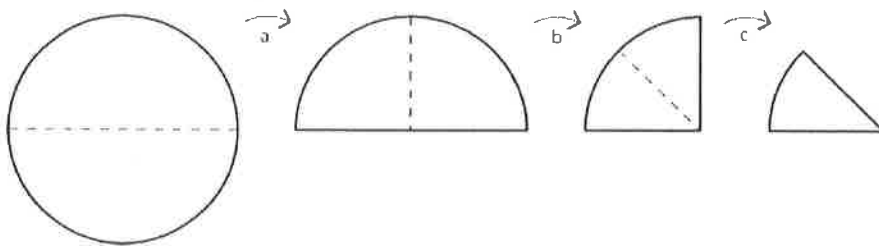
16. Bart is getting his hair cut. When he looks in the mirror, the clock on the wall behind him looks like this:



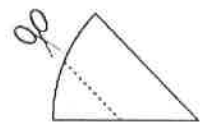
What would he have seen if he had looked in the mirror ten minutes earlier?



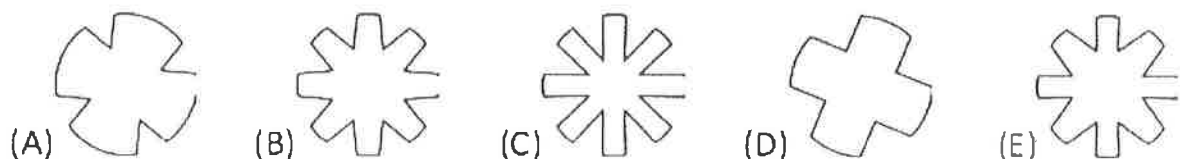
17. Eugénie folded a round sheet of paper in half, three different times, along the dotted lines as shown in a, b, and c below.



Then, she cut the folded paper along the dotted line, parallel to the folding line, as shown to the right.



Finally, Eugénie unfolded the paper. What shape did she unfold?



18. Each card can have any one of 1 through 9 on its other face. (Digits can be used more than once.) On the other face is a secret 4-digit number. Use these clues to find the digits that make up the number:

The ones digit is six times the tens digit.

The hundreds digit is twice the tens digit.

The thousands digit is three times the hundreds digit.

The sum of all four digits is 15.

A	B	C	D
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The number is: _____

19. Each card can have any one of 1 through 9 on its other face. On the other face is a secret 5-digit number. Use these clues to find the digits that make up the number:

The ten thousands digit is three times the hundreds digit.

The sum of the hundreds digit and the thousands digit is the ones digit.

The thousands digit is two times the hundreds digit.

The sum of all four digits is 31.

A	B	C	D	E
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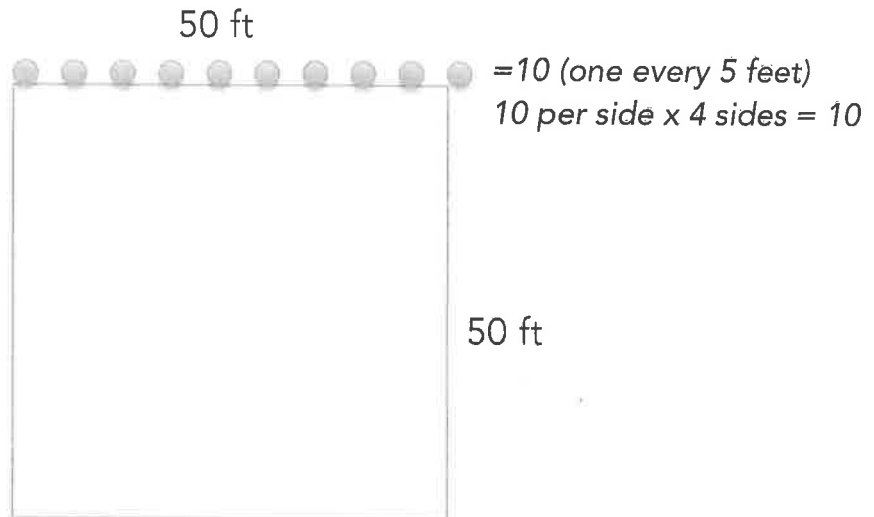
The number is: _____

20. Solve the multiplication crossword puzzle.

2	x		=	6		x	5	=	30
				x	x				
	x	1	=		8	x	4	=	
			=		=				
						x	24	=	

4th grade Math Madness 2017 – **ANSWER KEY**

1. 40 trees



2. Increase by 18, decrease by 7, increase by 18, etc.... (or +18, -7, +18, -7)
3. 102 minutes
 $34 \times 3 = 102$ (34 cuts at 3 minutes per cut.)
You need to make 34 cuts to get 35 pieces.
4. 18 rectangles (Don't just look at the lines. If you take sections 1 and 2, you get a 3rd triangle, etc.)



5. a) $(1 \times 1 \times 3) \times 8 = 24$
b) $(6 - 5) \times 4 \times 6 = 24$
6. There will be six handshakes total.
 3 (person 1) + 2 (person 2) + 1 (person 3) = 6
The fourth person has, by this time, had her hand shaken by everyone.

12. Sudoku! It's a pretty easy one.

2	3	5	1	4	7	9	8	6
4	1	8	9	6	5	7	2	3
6	9	7	2	8	3	1	4	5
9	8	6	5	7	4	2	3	1
5	7	3	8	1	2	4	6	9
1	4	2	6	3	9	8	5	7
7	5	9	3	2	8	6	1	4
8	6	4	7	5	1	3	9	2
3	2	1	4	9	6	5	7	8

13. Hidato! Also pretty easy!

26	27	7	6	9	12	11
23	25	28	8	5	10	13
24	22	19	29	4	15	14
21	20	30	18	16	3	1
36	38	39	31	17	45	2
37	35	32	40	44	46	48
34	33	41	42	43	49	47

14. Strategy: List the single-digit primes. (*Remember, neither 0 nor 1 are prime!*)

The single-digit prime numbers are 2, 3, 5, and 7. Select the 3 greatest numbers from this list and write them from largest to smallest. The last time before noon when all 3 digits are prime is 7:53.

15. The letter B is at the bottom of the box! Make one on blank paper and fold it yourself!

16. Since it's currently 1:45 or a quarter 'til 2:00, ten minutes earlier would be letter **A**, 1:35.

17. Eugénie would unfold shape **D**. Try it yourself!

18. 6 2 1 6

19. 9 6 , 3 4 9

20.

