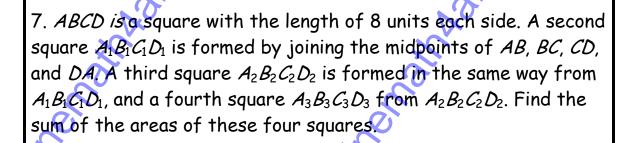


6. If two angles are supplementary and one of the angles is 9 times as large as the other, then the number of degrees in the measure of the larger angle?

(a) 161

(c) 162

(b) 163



(e) 194 (d) 180

(b) 120

8. If p + q = 13, q + r = 14, r + p = 15, then the value of ris

(a) 5

(c) 4

(b) 8

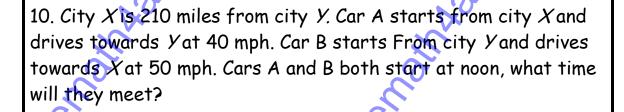
(d) 6

9. The number of three-digit perfect squares are,

(a) 48

(c) 22

(b) 11



(a) 12:20 pm

(c) 1:20 pm

(b) 3:20 pm

(d) 2:20 pm

11. The cost of a slice of pizza is \$1. The cost of a pie, which is composed of 8 slices, costs \$6. John buys individual slices and pies so that he has 78 total slices. If he has to pay \$62, how many slices does he buy individually?

(a) 12

(c) 13

(b) 11

(d) 14

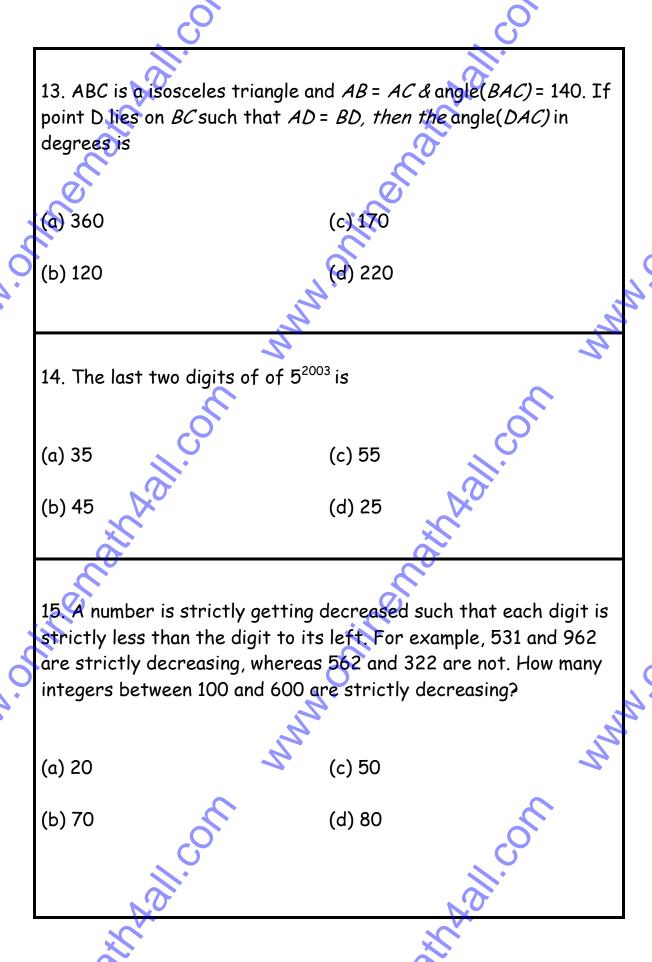
12. If A + B = square root of (8) and A - B = square root of (5), what is  $A \times B$ ?

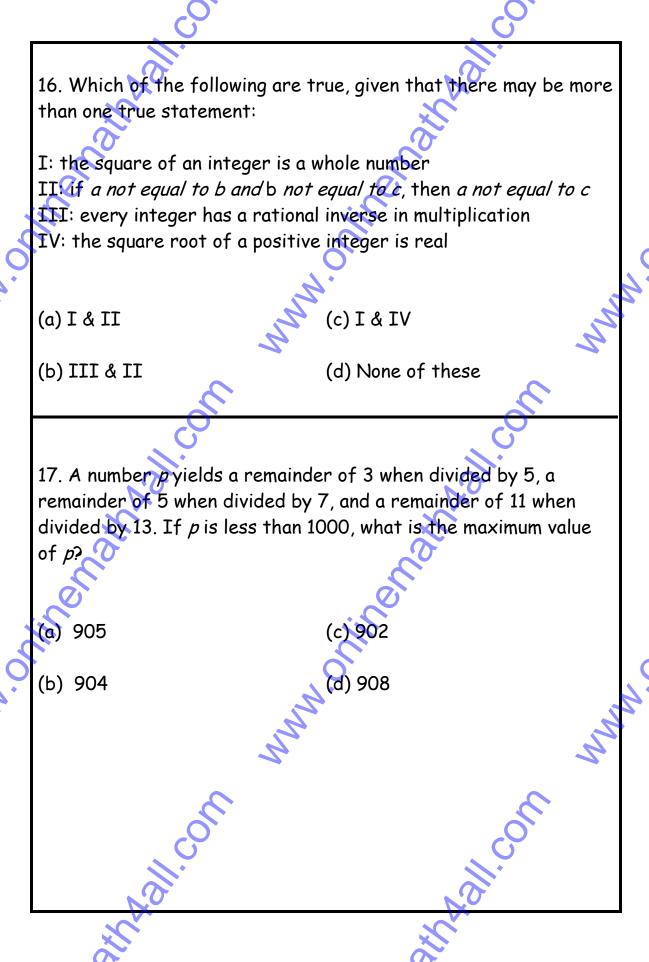
(a) 1/8

(c) 3/4

(b) 5/9

(d) 3/6





	18. In the <i>magic squar</i> the empty boxes so the column, and diagonal col	hat the sums of	f the numbe	rs in each row,	
	value of x?	19 a	b		ill of the state o
Thy.			26		7.
7		x	d	2	

		0	
19	a	b	
	nc.	26	
	х	d	~
	(c) 1	3	
	(d) 1		CAC
	(u) 1		

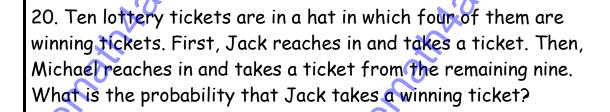
(b) 14

19. There is a silly number ababab is formed by repeating a twodigit number ab exactly three times. For example, 252525 is a silly number. What is the greatest common divisor of all silly numbers?

(a) 10102

(c) 10101

(b) 10103



(a) 3/5

(c) 6/5

(b) 2/5

(d) 1/5

21. The unit digit of  $13^{17} + 17^{13}$  is

(a) 1

(c) 9

(b) 2

(d) 0

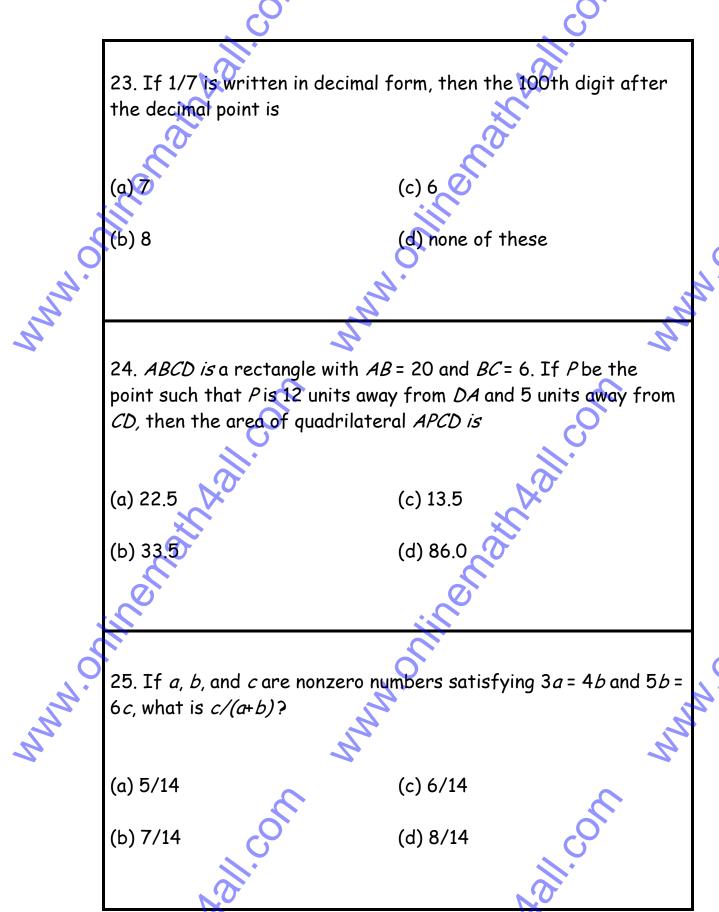
22. If the diameter of a circle is 376216 inches, using the approximation  $\pi$  = 3:14, compute the ratio of the circle's area, in square inches, to its circumference, in inches.

(a) 94054:1

(c) 94054:2

(b) 94054:3

(d) 94054:4



	COL	COLL	
		e of 2 and 6, then the ratio of th the volume of the smaller sphere	
	(a) 27 (b) 8	(c) 216 (d) 6	Officer
MAN O.	19×38×57152×171). What	e first nine multiples of 19 (i.e. P =	
	(a) 2 (b) 0	is the last digit of P?  (c) 1  (d) 3	
	28. The ages of Mr. and Mrs. Fi numbers. If Mr. Fibonacci's age	ibonacciare both two-digit e can be formed by reversing the	a offiner
NN ON O		find the smallest possible positive (c) 1	
	(b) 5	(d) 9	

(c) 5000

MINN.S (b) 15000 (d) 16000

30. The number of positive divisors of 120 are divisible by 4 are Agli.of

(a) 8

(c)4

(b) 5

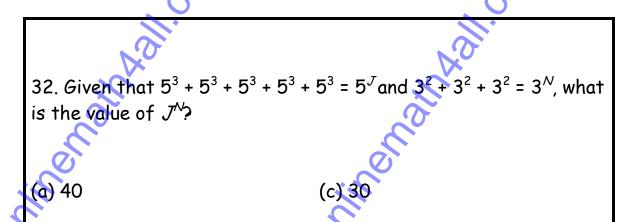
(d) 6

31 A pair of positive integers p and q is such that their greatest common divisor is 5 and their least common multiple is 55. Find the smallest possible value of p +

(a) 40

(c) 45

(b) 36



(b) 64

33. The difference between the two positive whole numbers is 3. (a) 13 (b) 4 The sum of their squares is 117. Find the larger of the two

(c) 32

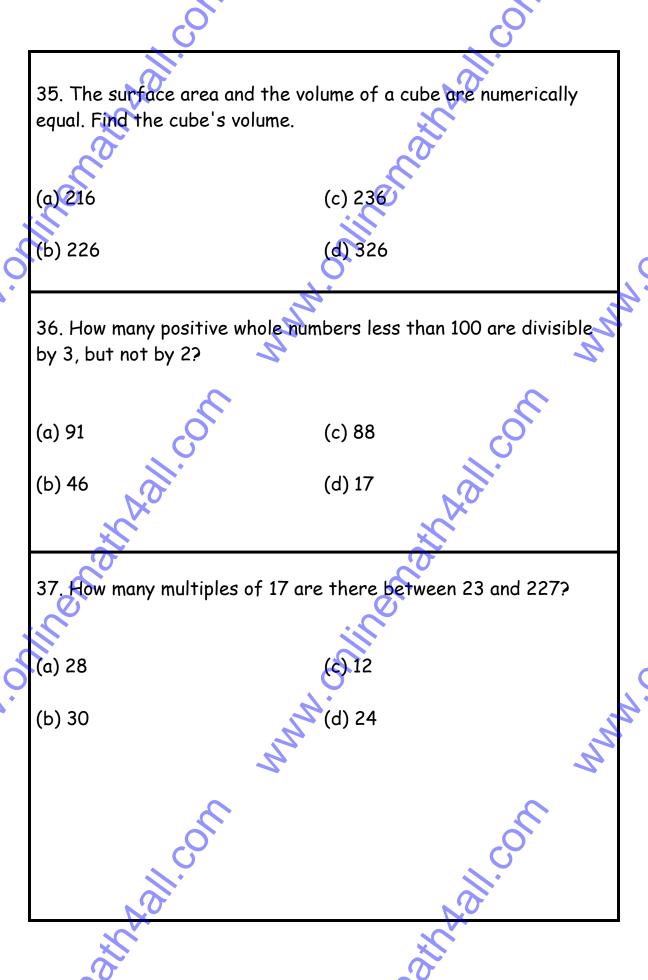
(d) 9

34. Given that absolute value of (3-a) = 2, compute the sum of all possible values of a

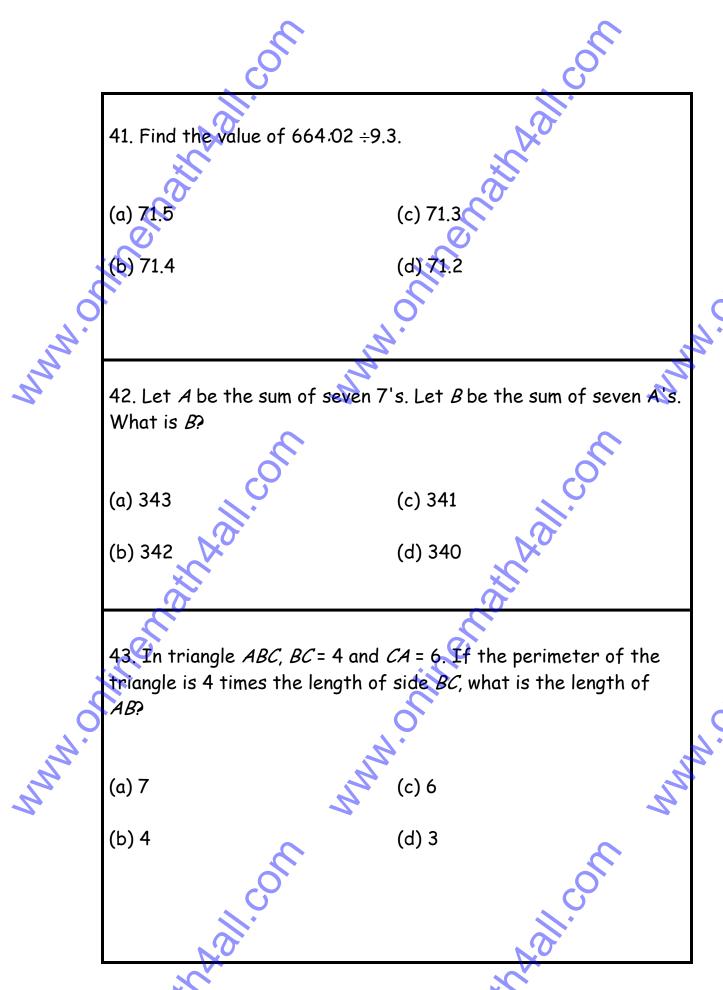
(a) 8

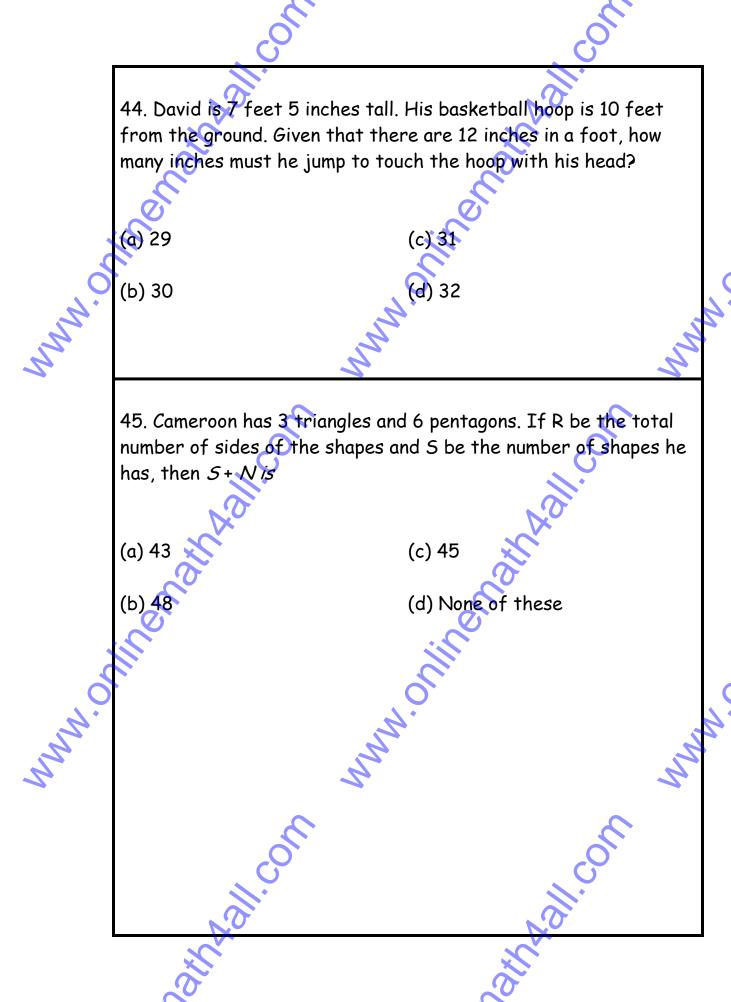
(c) 5

(b) 9



	com		COM	
	38. Compute the larges	t divisor of 2800 that is	a perfect square.	
	(a) 200	(c) 400		
	(b) 300	(d) 500		Ofline
MMM.		NA,	Ž	4.
n	39. Find the product of	the integers from -5 to	5, inclusive.	
	(a) 3	(c) 1	Colli	
	(b) 2	(d) 0		
	40. A particular number 11, the final number is 2	r is doubled and the resu 23. What is the original	ult is increased by number?	
	(a) 4	(2)3		illo
MAN.	11, the final number is a (a) 4 (b) 6	(d) 1		A COMPANY OF THE PROPERTY OF T
			OFF	
	and the state of t			





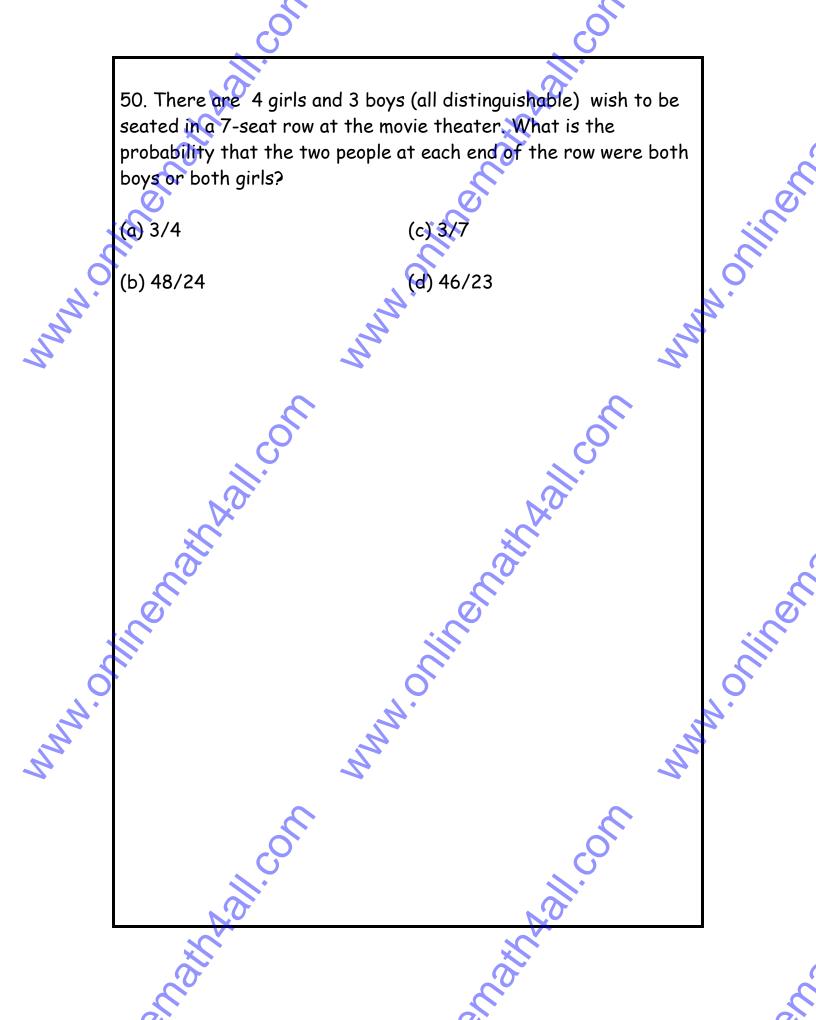
46. Arnold would like to get at least 90% of math competition
problems correct. However, he has only answered 20 out of 50
correctly so far this year. What is the least number of problems
he has to solve in the future in order to reach 90%?

(a) 210 (h)

47. Boucher only watches 4 channels during a certain period. He spends one-third of the period watching the History Channel's documentary about him. He spends one-fourth of the time watching Jeopardy!, where he is the answer to the final jeopardy question. Then he watches ESPN for MathCounts for another one-fourth of the time. He spends the rest of the time, 7 hours, watching the Answer to Everything channel. How long, in hours, is the period in which Boucher does all of these things?

(a) 42

in on	48. A foot ball team is struggling, being outscored 20 to 12 over their first eight games. Given that their opponents never scored more than three goals in one game, what is the maximum number of wins the team can have so far?  (a) 6  (b) 5  (d) 4	
h	49. Let the number of rabbits multiply by 5 in population every hour. Let the number of ants multiply by 3 in population every	
	hour. Rabbits initially have a population of 81 and ants have an initial population of 625, after how many hours will the rabbit population equal the ant population?	
0,0	(a) 1 (c) 5 (d) 4	
hun		<i>y</i> .
	Chair all com a chair all com a chair	



		· cos				on	
	Answers	Mollin			XXX	•	
	1. c	2. b	3. b 9. c 15. a	4. a	5. d	6. c	The Cliff
Why or	7. b	8. b	9. c	10. d	11. d	12. c	100
MAN	13. b	14. d	15. a	16. c	17. d	18. a	
	19. c	20. b	21. d	22. a	23. b	24. d	
	25. α	26. a	27. b	28. d	29. 0	30. a	
	31. d	32. b	33. d	34. d	<b>3</b> 5. a	36. d	
Mul O.	37. c	38. c	39. d	40. b	35. a 41. b 47. a	42. a	
The same	43. c	44. c	45. b	46. c	47. a	48. d	
	49. d	50. c				on on	
		VOII.			No.	-	
					Coll		