

(a) 42

(c) 35

(b) 25

(d) 76

5. For a certain commodity the demand equation giving demand "d" in kg, for a price "p" in dollars per kg is d=100 (10-p). The supply equation giving the supply "s" in kg. for a price "p" in dollars per kg is s=75(p-3). The market price is such at which demand equals supply. Find the market price and quantity that will be bought and sold.

(a) \$7,250 kg, 250kg

(c) \$7, 350kg, 350kg

(b) \$7, 275 kg, 275kg

(d) \$7,300kg, 300kg

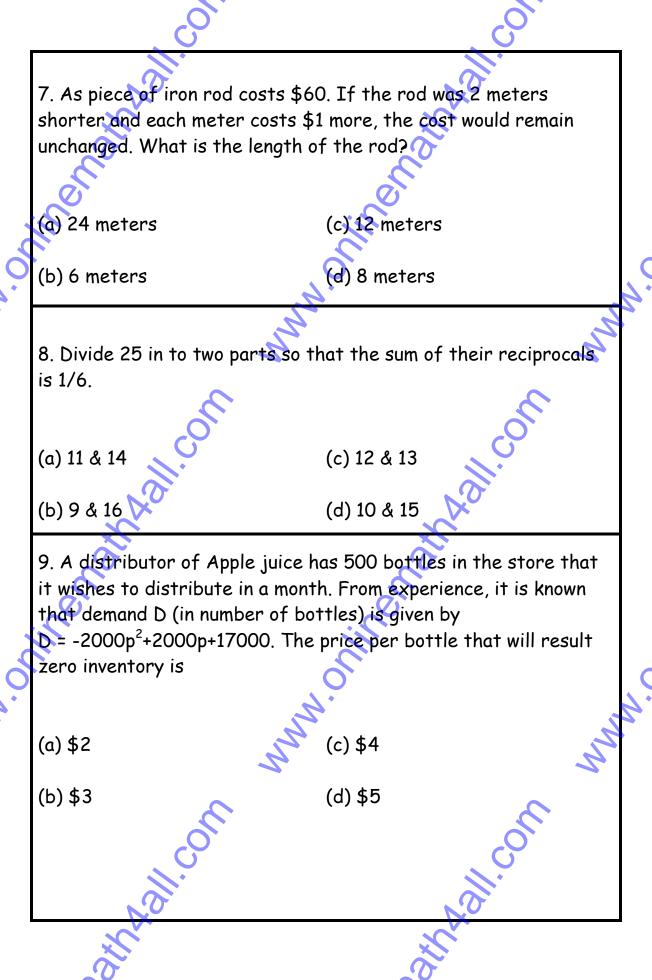
6. If the numerator of a fraction is increased by 2 and the denominator by 1, it becomes 1. Again if the numerator is decreased by 4 and the denominator by 2, it becomes 1/2. Find the fraction.

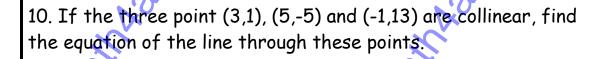
(a) 5/6

(c) 3/4

(b) 7/8

(d) 1/2





(a)
$$3x+y=10$$

(c)
$$5x+y=10$$

(d)
$$6x+y=10$$

11. An employer recruits experienced (x) and fresh work men (y) for his firm under the condition that he can not employ more than 9 people. "x" and "y" can be related by the inequality

(a)
$$x+y=9$$

(b)
$$x=9v$$

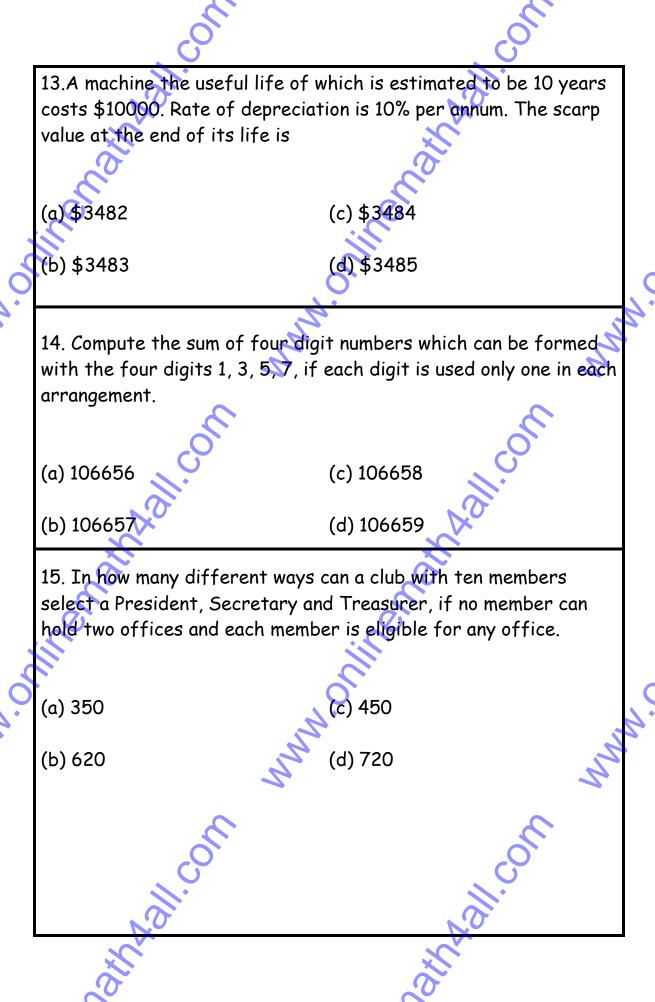
12. \$5000 is deposited in a term deposit scheme that fetches interest 6% per annum compounded quarterly. What will be the interest after one year? What is effective rate of interest?

(a) \$304.82, 6.13%

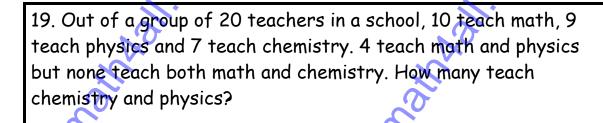
(c) \$306.82, 6.13%

(b) \$305.82, 6.13%

(d) \$307.82, 6.13%



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	16. A box contains 7 red, 6 white selections of three balls can be m color?	and the control of th	
		(c) 238 ways	Chinoch
Why Co.	(b) 168 ways	(d) 132 ways	7.00
	17. A person is employed in a compound get an increase of \$100 per which he receives in 25 years and year.	year. Find the total amount	
	(a) \$1260000, \$5400	(c) \$1260000, \$5 000	
	(b) \$1260000, \$5200	(d) \$1260000, \$4800	
ANN O.	18. The population of a country wo growing at 2% per annum compour year 2015 is estimated as	as 55 crore in 2005 and it is not interest, the population in the	A. Cilifordina de la constantina della constanti
	(a) 5705	(c) 6700	3.
11	(b) 6005	(d) None of these	
	Caill Coll	Cairlall.com	
		COLL	2



(a) 7

(c) 2

(b) 1

(d) 6

20. The girder of a railway bridge is in the parabolic form with span 100ft. and the highest point on the arch is 10ft. above the bridge. Find the height of the bridge at 10 ft. to the left or right from the midpoint of the bridge.

(a) 12.5 ft

(c) 13.5 ft

(b) 9.6 ft

(d) 24.5 ft

21. Find the radius of the circle whose equation is

$$4x^2+32x+4y^2-32y+47=0$$

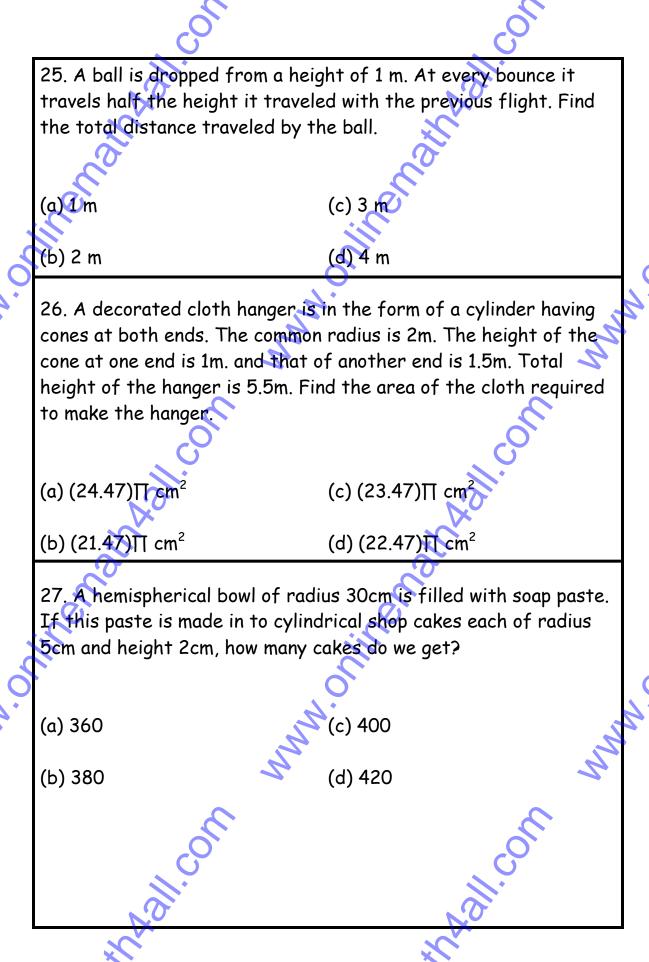
(a) 5.5

(c) 2.5

(b) 3.5

(d) 4.5

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	22. The angles of a quadrilateral are in an A.P difference is 10°. Find the angles.	whose common		
	(a) 75°,85°,95°,105° (c) 70°,80°,90°			
	(b) 85°,95°,105°,115° (d) 65°,75°,89 23. In a school sports day, picking balls kept in the cames, 20 balls were placed in a straight l	n a line was one of		
n	the games. 20 balls were placed in a straight line on the ground at intervals of 3 meters. The starting point was at a distance 3 meters from the first ball in line with the balls. How far a boy would have to run to bring the balls one by one to a basket kept			
	at his starting point?			
	(a) 1820 m (c) 2023 m	No.		
	(b) 2044 m (d) 1260 m			
	24. 150 workers were engaged to finish a piec certain number of days. Four workers dropped second day. Four more workers dropped in the	I from the work the third day and so		
hhh	on. It took 8 more days to finish the work. Fin days in which the work was completed.	nd the number of		
	(a) 20 (c) 50			
	(b) 25 (d) 60			



28. Let R be a relation on a seta. R is called an equivalence relation if R is

(a) Reflexive

(c) Symmetric

(b) Transitive

(d) Reflexive, Symmetric, Transitive

29. In triangle ABC, angle $C = 20^{\circ}$ greater than angle A. The sum of angle A and angle C is twice angle B. Find the three angles.

(a) 30°, 70°, 80°

(c) 55°, 65°, 75°

(b) 40°, 50°, 60°

(d) 50°, 60°, 70°

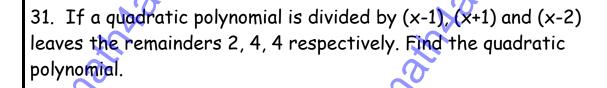
30. 100 pencils are to be kept inside three types of boxes A, B and C. If two boxes of type A, three boxes of type B, two boxes of type C are used, 6 pencils are left out. If three boxes of type A, five boxes of type B, two boxes of type C are used, two pencils are left out. If two boxes of type A, four boxes of type B and four boxes of type C are used, there is space for four more pencils. Find the number of pencils that each box can hold.

(a) 8, 9, 10

(c) 8, 10, 11

(b) 8, 10, 12

(d) 9, 10, 12



(a) x^2 -x-2 (b) x^2 +x+2

32. Determine the value of m'', if (x+1) is a factor of $x^3+mx^2+19x+12$.

(a) 8

(c) 10

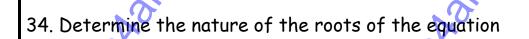
(b) 9

(d) 11

33. The outer dimensions of a bordered table are 72 cm and 108 cm. If the area of the table, excluding the border is 6400 cm². Hogw wide is the border?

(a) 1 cm

(b) 2 cm



$$4x^2-28x+49=0$$

(a) imaginary

- (c) rea
- (b) real, equal, rational
- (d) real, equal, irrational

n times the roots.

(c) ax²+nbx-n²c

(d) ax²-nbx-n²c 35. Find the equation whose roots are n times the roots of the equation ax^2+bx+c

(b) ax²+nbx+n²c

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36. A project consists of 12 jobs. Draw the project network and determine the duration of critical path.

Job	Activity	Duration(weeks)
AU	1-2	2
В	2-3	7
C	2-4	3
D	3-4	3
Е	3-5	5
F	4-6	3
G	5-8	5
Н	6-7	8
I	6-10	4
J	7-9	4
K	8-9	1
L	9-10	7.0
		* * *

(a) 32 weeks

(c) 35 weeks

(b) 34 weeks

(d) 36 weeks

37. The angle in the semicircle is a

(a) right angle

(c) acute angle

(b) obtuse angle

(d) straight angle



(a) 90°

(c) 100°

(b) 270°

(d) 180°

39. ABCD is a quadrilateral with angle B = 90° . If $AD^2 = AB^2 + BC^2 + CD^2$, then the angle ACD is

(a) 90°

(c) 100°

(b) 270°

(d) 180°

40. In what ratio is the line segment joining the points A(4,4) and B(7,7) divided by the point C(-1,-1)?

(a) 5:8

(c) 8:5

(b) 2:5

(d) 9:1

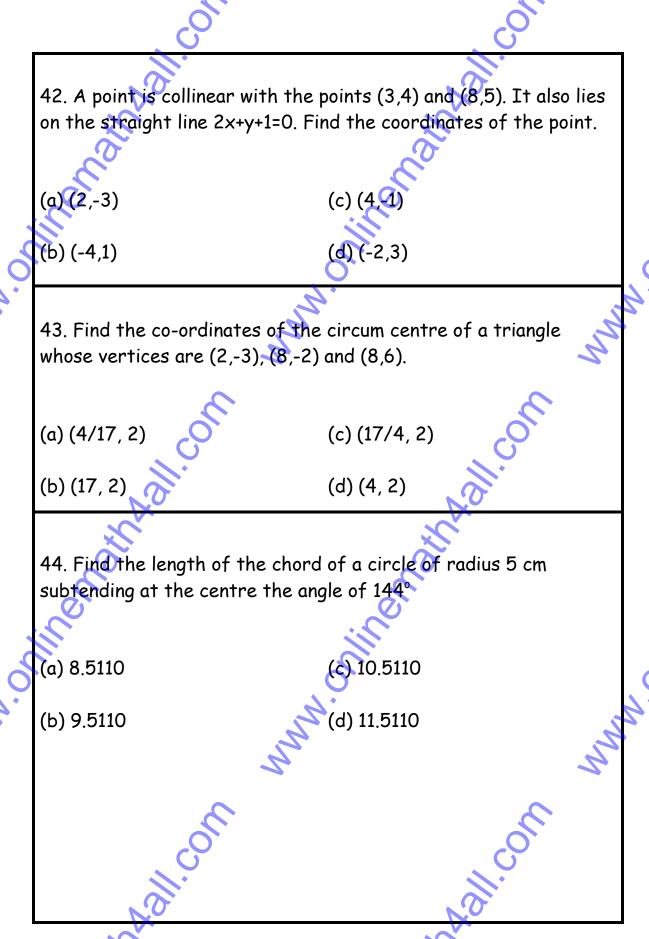
41. Find the equation of a straight line parallel to the line joining the points (7,5) and (1,3) and passing through the point (-3,4).

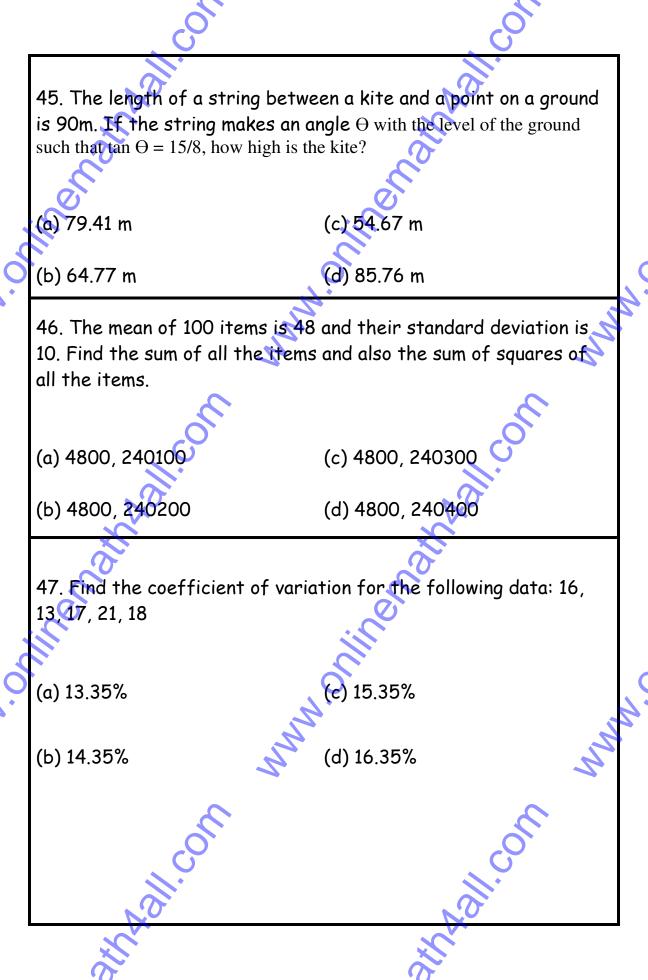
(a) x+3y+15=0

(c) x-3y-15=0

(b) x-3y+15=0

(d) x+3y-15=0





	48. A factory has two sections A and B with 50 and 60 employees respectively. Their average weekly wages are \$386 and \$475. The standard deviations are 9 and 10. Which section has greater variability in wages?	
Why.	(a) A (c) A and B are equal (b) B (d) None of these	A CHICAGO
M	49. A fair die is rolled. Find the probability of getting prime factors of 6 on the die.	
	(a) 2/5 (c) 2/3 (d) 1/3	
	50. A number is chosen at random from 1 to 50. Find the	World Constitution of the second seco
MM4.	probability that the number is divisible by 5. (a) 2/5 (c) 2/3	0.
	(b) 1/5 (d) 1/3	

		· cos				on		
	Answers:	Volli			XX			
	1. c	2. d	3. a 9. d 15. d	4. a	5. d	6. b		Oh
MANNA O	7. c	8. d	9. d	10. a	11. d	12. c		
NA	13. b	14. a	15. d	16. b	17. a	18. d		
		(22. a	23. d	24. b		
	25. c	20. b	27. α	28. d	29. d	30. b		
	31. c	32. a	33. d	34. b	3 5. a	36. b		200
Muly Sold Sold Sold Sold Sold Sold Sold Sold	37. a	38. d	39. α	40. a	35. a 41. b 47. c	42. d		
NAN.	43. c	44. b	45. a	46. d	47. c	48. a		
7	49. d	50. b					7,	
		1.01						
	No.	50. b			No Colonia de la		_ _	9