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1.

1) B is mother of D but D is not daughter of B.

2) A is son of M and brother of G.

3) G is sister of D

Which of the following cannot be referred from the given information ?

(A) B has 3 children

(B) M has two sons

(C) G is younger to B.

(D) A is younger to D

Answer: d

Explanation:

D is the son of B. Also from the third clue, G and D are siblings. A is the brother of G (from 2nd clue). So A, G, D are siblings. A is the son of M. So M is the father (as B is the mother).

Finally, B and M has 3 children : 2 Sons D & A, and daughter G.

Definitely G is younger to B as she is daughter of G

But it can't be said who is younger among children A,D & G. So option D is not inferred.

2. A contractor undertook to make 15 km of roadway in 40 weeks. In 10 weeks, 3 km was complete by 180 men working 8 hours a day. The men then agreed to work 1 hour a day overtime, And some boys were engaged to assist them, the work was finished in the stipulated time(40 weeks). How many boys were employed, if the work of 3 boys is equal to that of 2 men?

a) 70

b) 50

c) 60

d) 80

Answer: b

Explanation:

Let the capacity of man = 3 units, and boy = 2 units per hour.

Now total work = 3×180×8×7×10 = 3 km. - - - - - - - (1)

Let k boys were recruited. Now total work = (3×180+2×k) ×9×7×30 = 12km. - - - - - - (2)

By dividing 2nd equation by 1st,

$\Rightarrow (540+2k)\times 9\times 7\times 303\times 180\times 8\times 7\times 10=4$

⇒ k = 50

3. A can do a piece of work in 10 days, B in 15 days. They work for 5 days. The rest of work finished by C in 2 days.If they get Rs 1500 for the whole work, the daily wages of B and C are?

Answer:

Explanation:

Let the total work = 30 units.

Then capacity of A = 3 units, B = 2 units. Now they worked for 5 days. So they must have completed 25 units. Rest of the work 5 units done by C in 2 days. So C capacity = 5/2 = 2.5 units.

Given that toatal wages are Rs.1500 for 30 units. So for 1 unit of work they get Rs.50. Now B and C per day work = (2 + 2.5) = 4.5 units. So their daily wages = 4.5 × 50 = Rs.225

4. The average of ten numbers is 7 .If each number is multiplied by 12 , then the average of new set of numbers is :

a) 7

b) 19

c) 82

d) 84

Answer: d

Explanation:

If each number is multiplied by K, then the new average increases by K times. So new average = 84

5. In an examination, a student scores 4 marks for every correct answer and loses 1 mark for every wrong answer. If he attempts all 75 questions and secures 125 marks, the number of questions he attempts correctly, is :

a) 35

b) 40

c) 42

d) 46

Answer: B

Explanation:

Let the number of correct answers be x.

Then numbers of incorrect answers will be 75 – x

We get 4x – (75 – x)×1= 125

On solving the equation we get x= 40

6. A car moves at the speed of 80 km/hr. what is the speed of the car in metres per second?

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A. 8 m/sec

B. 20 × 19 m/sec

C. 21 × 29 m/sec

D. 22 × 29 m/sec

Answer: D

Explanation:Formula

For convert km/hr into m/sec multiply the speed with 518

For convert m/sec into km/hr multiply the speed with 185

80 × 518 ⇒ 22 × 29 m.sec.

7. 3 men can complete a piece of work in 6 days. Two days after they started the work, 3 more men joined them. How many days will they take to complete the remaining work?

Answer: 2 days

Explanation:

3 man 1 day work = 16

3 man 2 days work = 26

Remaining work = (1 – 26) = 2/3 parts.

6 man together perform the work in 1 day is = 16 + 16 = 26 parts

26

23

8. A single discount % equal to three successive discounts of 30%, 20% and 10%.

A. 49.6%

B. 50.4%

C. 40%

D. 60%

E. None of these

Answer: a

Explanation:

Let the initial price be 100.

30% discount on 100 is 30

(100 – 30) = 70

20% discount on the 70 is 14

(70 – 14) = 56

10%discount on the 56 is 5.6

So the answer is 30 + 14 + 5.6 = 49.6

9. If "PROMPT" is coded as QSPLOS ,then "PLAYER" should be

(a) QMBZFS

(b) QMBZDW

(c) QUREXM

(d) QMBXDQ

Answer: d

Explanation:

1st 3 letters are denoted by its next alphabet and the next 3 letters are denoted by its previous alphabets.

10.Which of the following are phases of 2-phase locking protocol?

1) Intent to request locks

2) Release the present locks and never asking for transmission

3) Both (1) and (2)

4) None of these

Answer: 3

11.When an array of pointers is passed through a function, what actually is passed?

1) address of the starting element

2) last element

3) first element

4) number of elements

Answer: 1

Explanation:

When any array is passed through a function,always the address of starting element is passed

12. If the operation,^ is defined by the equation x ^ y = 2x + y, what is the value of a in 2 ^ a = a ^ 3

A)-2

B)-1

C)0

D)1

Answer: d

Explanation:

2^a = 2 × 2 + a - - - (i)

a^3 = 2 × a + 3 - - - (ii)

4 + a = 2a + 3

⇒ a = 1

13. In a certain school, 20% of the students are below 8 yrs of age. The number of students above 8 yrs of age is (2/3) of the number of students of 8 years age which is 96. What is the total number of students in the school?

Answer: 200

Explanation:

Let total students be x.

⇒ 0.2x + 23 × 96 + 96 = x

⇒ x = 200

14. If there are 5,000 voters out of which 20% are not eligible to vote and there are two candidates contesting. The winning candidate won by 15% of votes. What is the total number of votes he got ?

Answer: 2300

Explanation:

Number of voters eligible for voting = 5000 × 0.8 = 4000

Number of votes extra got by the winning candidate = 4000 × 0.15 = 600

Let the number of votes won by winning candidate = x.

⇒ x – (4000 – x) = 600

⇒ x = 2300

15. Find the set of all points (x, y) such that the area of the triangle with vertices (0, 0), (6, 4) and (x, y) is 4.

A).(x, y) lies on the circle (y – 6)2 + (x – 4)2 = 16

B).(x, y) satisfies 6y – 4x = 8 or 6y – 4x = –8

C).(x, y) satisfies 6y – 4x = 4 or 6y – 4x = –4

D).(x, y) satisfies 6y – 4x = 8

Answer: b

Explanation:

Area of a triangle if one of the point is (0, 0) = $12|(x_1y_2-x_2y_1)|$

$\Rightarrow 12|(6\times y-4\times x)| = 4$

$\Rightarrow 6y - 4x = 8$

16. When not moving on the sidewalk, Maya can walk the length of the sidewalk in 7 minutes. If she stands on the sidewalk as it moves, she can travel the length in 4 minutes. If Maya walks on the sidewalk as it moves, how many minutes will it take her to travel the same distance? Assume she always walks at the same speed, and express your answer as a decimal to the nearest tenth.

(a) 3.6

(b) 2.5

(c) 3.8

(d) 2.8

Answer: b

Explanation:

Assume distance of sidewalk "x"

Speed 1 (moving on sidewalk)

Speed 2 (moving off sidewalk)

Since both the movements are in same direction, we can do speed 1 + speed 2

Speed 1 = $x4$

Speed 2 = $x7$

Speed 1 + speed 2 = $11x28$ = = 0.39286x

Now new time while moving on sidewalk = $x0.39286x$ = 2.54544

Hence, the answer is 2.5

17. The ages of Old and Young total 48. Old is twice as old as Young was when Old was half as old as Young will be when Young is three times as Old was when Old was three times as old as Young. How old is Old?

(a) Old-42, Young-26

(b) Old-38, Young-22

(c) Old-30, Young-18

(d) Old-28, Young-14

Answer: c

Explanation:

From the options itself,we can see that option c

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old = 30

young = 18

30 + 18 = 48

By reducing this years only by one

Before 6years

old = 24 (half of young)

young = 12 (twice of old)