

STD 4 Scholarship Exam Maths (2003) (7 solved)

3. $205 \times 25 = ?$

(1) 5025

(2) 5125

(3) 50125

(4) 51025

$205 * 25 = (200 + 5) * 25$

$= 200 * 25 + 5 * 25$

$= 5000 + 125$

$= 5125$

(Whole process should be done mentally without writing anything on paper.)

17. The cost of 6 cups is Rs. 30 P 60, then what is the cost of each cup ?

(1) Rs. 5 P 10

(2) Rs. 15 P 30

(3) Rs. 5

(4) Rs. 5 P 60

$Rs\ 30, P60 = P(30*100 + 60) = P(3000 + 60) = P(3060)$

$So\ cost\ of\ each\ cup = P(3060)/6 = P(510) = Rs. 5, P10$

(Again the process should be done mentally without writing anything on paper.)

32. $999 + 111 = ?$

(1) 1010

(2) 1100

(3) 1000

(4) 1110

$999 + 111 = 999 + 1 + 110 = 1000 + 110 = 1110$

35. Which digit is in the hundreds place, in the addition (1234 + 2341) ?

(1) 5

(2) 7

(3) 3

(4) 2

No carry in units and tens place addition (4+1 and 3 + 4). Hence simply add hundreds place numbers, i.e. $2+3 = 5$

41. John started ploughing the field at 8 O'clock before noon. He went for lunch at half past one after noon. For how many hours did he work ?

- (1) Five and a half (2) Six and a half
 (3) Seven (4) Nine and a half

8.00 AM to 12.00 AM = 4 hours

12.00 AM to 01.30 PM = 1 Hour, 30 Mins

In all, 5 hours, 30 mins.

44. Gaurav Singh bought a pen worth five and a quarter rupees, an ink-bottle worth six and a half rupees and a ruler worth one and a half rupee. How much money should he give to the shopkeeper ?

- (1) Thirteen and a half rupees
 (2) Thirteen rupees
 (3) Thirteen and a quarter rupees
 (4) Twelve and three quarters rupees

total cost = $5.25 + 6.5 + 1.5$

Add up paises part first, that comes to be one and quarter Rs, pass on Re 1 to Rs section, That will make $5 + 6 + 1 + 1 = \text{Rs } 13$. Hence ans is Rs 13, P25.

49. $3 \times (7 + 3) - (27 \div 9) \times 10 = ?$
 (1) 0 (2) 20 (3) 60 (4) 6

Solve the brackets first.

$$3 \times (10) - (3) \times 10$$

Then do the multiplications

$$30 - 30$$

Then do the subtraction

$$30 - 30 = 0$$

STD 4 Scholarship Exam Maths (2005) (17 solved)

17. $2643 + 1956 = \dots\dots\dots$

(1) 1599

(2) 3599

(3) 4599

(4) 4598

No need to do actual addition. Add units places, that comes out to be $3 + 6 = 9$.

Now apply approximation.

$$2643 + 1956 > 2600 + 1900$$

$$\text{So } 2643 + 1956 > 4500$$

Only one option has addition > 4500 and 9 at the units place i.e. option 3

19. $4956 - 243 = \dots\dots\dots$

(1) 4719

(2) 4713

(3) 2526

(4) 4799

Units place $6 - 3 = 3$. Only one option has 3 at the units place, i.e. option 2.

$536 \div 4 = \dots\dots\dots$

(1) 132

(2) 124

(3) 134

(4) 114

*It's better if you can start with $130 * 4 = 520$. Just look at the numbers. Try to find a number that can take you closer to the answer. Here this number is 130. Now as $536 > 520$, your answer is also greater than 130, and with 6 at the units place in 536, answer has to have either 9 or 4 at its units place. That solves your problem, i.e. option 3.*

21. If we buy three and a half litre milk daily, what is the quantity of milk is bought in 5 days ?

- (1) Fifteen and a half (2) Seventeen
 (3) Fifteen (4) Seventeen and a half

$$3.5 * 5$$

Start with $3.5 * 4 = 14$, and 3.5 litres of 5th day. That gives the answer 17.5.

22. $207 \times 12 = \dots\dots\dots$

- (1) 2404 (2) 2472
 (3) 2460 (4) 2484

$$207 * 12 = (200 + 7) * 12 = 200 * 12 + 7 * 12 = 2400 + 84 = 2484$$

Try to do whole process mentally.

23. If 10 kg 120 gms sugar is equally distributed among 4 people, what is the share each one will get ?

- (1) 2 kg 430 gms (2) 25 kg 30 gms
 (3) 20 kg 530 gms (4) 2 kg 530 gms

Two approaches are possible. Read both and follow whichever suits you more!

1. Divide 10Kg into 4 parts, each part will be equal to 2.5Kg
 Now divide 120Gms into 4 parts, each part will be 30Gms.
 Add two, that will give the answer = $2.5\text{Kg} + 30\text{Gms} = (2500 + 30)\text{Gms} = 2530\text{Gms} = 2\text{Kg } 530\text{Gms}$
2. $10\text{ Kg } 120\text{ Gms} = (10000 + 120)\text{Gms} = 10120\text{ Gms}$
 Divide this number by 4 to get answer = $2530\text{ Gms} = 2\text{Kg } 530\text{ Gms}$

You may tend to feel that approach 2 is simpler than approach 1. But Its not that. if your fundamentals are crystal clear approach 1 will give a faster answer.

25. If 4 m 85 cm long string is cut from the 7 metre long string, what is the length of the remaining portion of the string ?

- (1) 3 m 15 cm (2) 2 m 15 cm
 (3) 15 m 15 cm (4) 3 m 85 cm

Here forward counting will help. Start with 4.85 m, another 15cm and you reach 5m. Another 2m and you have reached your destination i.e. 7m. So 2 m and 15 cm is your answer.

26. It was Tuesday on 10th June, 2003, which day was on 19th June, 2003 ?

- (1) Wednesday (2) Thursday
 (3) Friday (4) Tuesday

Get the date difference $19-10 = 9$

Divide it by 7, look at the remainder. Remainder is 2.

Asked date is a later date, so go 2 days ahead and the answer is Thursday.

27. 504 metres long wire is cut at 8 places to have equal pieces. Find the length of each piece of wire in metres.

- (1) 56 (2) 68
 (3) 63 (4) 54

Cut at 8 places and you will get 9 pieces. That is the key here. $504/9 = 56$.

29. If 50 paise worth 36 coins are given away and in exchange coins of Rs. 2 each are taken, how many coins we will get worth Rs. 2 ?

- (1) 90 (2) 9
 (3) 900 (4) 19

36 coins of 50 paise = Rs 18

Rs 18 = 9 coins of Rs 2

32. The length of a rectangular garden is 45 metres. To have a seven layered fencing around a rectangular garden, 952 metre wire is required. Find the breadth of the garden.

(1) 46 (2) 30

(3) 23 (4) 27

Length of one layer of fencing = $952/7 = 136$ m

So perimeter of the garden = 136 m

Perimeter of a rectangle = $2\text{length} + 2*\text{breadth}$*

*So $136 = 2*45 + 2*\text{breadth} = 90 + 2*\text{breadth}$*

(Subtracting 90 from both the sides)

$136 - 90 = 90 + 2\text{breadth} - 90$*

So $46 = 2\text{breadth}$*

(Dividing both the sides by 2)

$46/2 = (2\text{breadth})/2$*

So $\text{breadth} = 23$ m.

35. There are 1,275 trees in a garden. Out of them 850 are of mango, 75 are of coconut and remaining are of Jackfruit. What is the number of Jackfruit trees in that garden ?

(1) 350 (2) 925

(3) 450 (4) 250

Adding up 850 and 75 first will help. $850+75=925$.

Now subtract. $1275 - 925 = 350$

37. Ajit has 64 coins worth 25 paise, and some 50 paise coins. He has total amount of Rs. 100 with him. What is the total number of coins he has ?

- (1) 332 (2) 168
(3) 232 (4) 102

64 coins worth 25 Paise = Rs 16

Amount in 50 Paise coins = $100 - 16 = 84$

*Rs 84 = $84 * 2 = 168$ coins of 50 Paise*

40. 18 beads make one necklace. Like this 32 necklaces are made. If in each necklace, 8 beads are put, how many necklaces can be made out of all these beads ?

- (1) 58 (2) 82
(3) 62 (4) 72

*Total number of beads available = $32 * 18$*

*If each necklace has 8 beads, no of necklaces = $(32 * 18) / 8 = 4 * 18 = 72$*

42. The product of the numbers $215 \times 43 = \dots\dots\dots$

- (1) 7310 (2) 1505
(3) 9245 (4) 8245

Approximate!

*$215 * 43 > 210 * 40$ So $215 * 43 > 8400$. Did you get the answer?*

46.
$$\begin{array}{r} 6000 \\ -1098 \\ \hline \end{array}$$
 The answer is :
- (1) 4902 (2) 5098
(3) 7098 (4) 5912

Forward count!

$$1098 + 2 = 1100, 1100 + 900 = 2000, 2000 + 4000 = 6000$$

$$\text{Ans} = 2 + 900 + 4000 = 4902, \text{ Simple?}$$

50. Pratibha had 1940 apples. She packed them as 36 in one box. She sold 20 boxes of apples and threw away 72 spoilt apples. Then find out that how many apples were left with her ?
- (1) 1248 (2) 1292
(3) 1148 (4) 1192

$$\text{Total apples sold} = 36 \times 20 = 720$$

$$\text{Add to these the spoilt ones, } 720 + 72 = 792$$

Now forward count!

$$792 + 8 = 800, 800 + 200 = 1000, 1000 + 940 = 1940$$

$$\text{So Ans is } 8 + 200 + 940 = 1148$$

So total beads with Ram = $70 + 35 = 105$

18. If 1 litre 250 ml of milk is bought daily, then how much milk is bought in a week ?

- (1) 7 litres (2) 7 litres 250 ml
 (3) 7 litres 750 ml (4) 8 litres 750 ml

Divide and conquer!

$$250 \text{ ml} * 7 = 1750 \text{ ml} = 1 \text{ litre, } 750 \text{ ml}$$

$$1 \text{ l} * 7 = 7 \text{ litres}$$

Total 8 Litre 750 ml

$$\text{Alternately} - 1 \text{ L, } 250 \text{ ml} = 1250 \text{ ml, } 1250 * 7 = 8750 \text{ ml} = 8 \text{ L, } 750 \text{ mL}$$

You may tend to feel that approach 2 is simpler than approach 1. But its not that. if your fundamentals are crystal clear approach 1 will give a faster answer.

23. In a village, there are 6718 males and 5829 females. If there are 7548 literates, then how many illiterates are there in the village ?

- (1) 4999 (2) 7059
 (3) 20095 (4) 8437

$$6718 + 5829 - 7548$$

Approximate!

$$6718 + 5829 < 6800 + 5900$$

$$6718 + 5829 < 12700$$

12700 - 7548 and your answer can't go beyond 6000!

36. How much sugar is required to be distributed among 3 children, if each gets 750 gms of sugar ?

- (1) 2.250 kg (2) 2.500 kg
 (3) 22.50 kg (4) 225.0 grams

Guavas in each box = $1800/15 = 120$

Guavas in 10 boxes = $10*120 = 1200$

23. $109 \times 78 = \dots\dots\dots?$

(1) 1635

(2) 7502

(3) 8502

(4) 7402

$109 * 78 = (100 + 9) * 78 = 7800 + 9*78 > 7800 \dots$ did you get the ans?

24. A milk collection centre collects 805 litres cow milk and 915 litres buffalo milk. How much of milk is left if 1575 litres of milk is sold ?

(1) 155

(2) 145

(3) 1720

(4) 255

total milk = $805 + 915 = 1720$ Litres

milk left = $1720 - 1575$

Forward count. $1575 + 25 = 1600$, $1600 + 120 = 1720$

milk left = $120 + 25 = 145$ litres

25. I have equal number of 1 rupee, 2 rupee and 5 rupee coins. If the total amount with me is Rs. 40, then how many total coins do I have ?

(1) 5

(2) 10

(3) 15

(4) 8

Use method of elimination! Options 10, 15 and 8 are out as

$10*5 = 50 > 40$, $15*5 = 75 > 40$, $8*5 = 40$ (no room for Rs 2 and Re1)

26. How much salt is required to fill 120 salt bags of 250 gm each ?

- (1) 3000 kg (2) 300 kg
 (3) 3 kg (4) 30 kg

$$120 * 250 = 30000 \text{ Gms} = 30 \text{ Kg}$$

Alternately each bag is quarter Kg, 4 bags = 1 Kg, 120 bags = 30 Kg.

27. 2 kg 2 gm = 2.002 kg.

- (1) 2.2 (2) 2.02
 (3) 2.002 (4) 2.0002

Remember 2 Gm = $2/1000$ Kg = 0.002 Kg, hence ans is 2.002 Kg

45. There are some 5 rupee and some 10 rupee notes worth Rs. 135. Then how many five-rupee notes can be there in this amount ?

- (1) 27 (2) 12
 (3) 8 (4) 15

Method of elimination revisited!

Number of Rs 5 notes has to be odd. Why?

As the amount is odd and we have Rs 10 notes other than Rs 5 notes!

*$27 * 5 = 135$, hence option 1 will fulfill the amount that is against the question statement 'some Rs 10 notes'. Hence the ans is option 4!*

STD 4 Scholarship Exam Maths (2008) (3 solved)

24. If four and a half litres of milk is taken daily, then how many litres of milk will be taken in one week ?
- (1) Twenty nine and a half
 - (2) Thirty one and a half
 - (3) Thirty six
 - (4) Thirty and a half

Divide the problem in two parts. four litres and half litres.

$$4 * 7 = 28 \text{ litres}$$

$$\text{half} * 7 = 3.5 \text{ litres}$$

Total 31 and half litres

31. Three-fourth part of a bucket having capacity of 20 l is filled with water. How much more litre of water will be required to fill the bucket completely ?
- (1) 15
 - (2) 10
 - (3) 20
 - (4) 5

$3/4^{\text{th}}$ of the bucket is filled with water. Hence $1/4^{\text{th}}$ of the bucket is empty.

$1/4^{\text{th}}$ of 20 = 5. So 5 litres of water is required.

38. If 15 kg 600 gm rice is equally distributed among six persons, how much rice will each person get ?
- (1) 3 kg 600 gm
 - (2) 2 kg 600 gm
 - (3) 1 kg 600 gm
 - (4) 2 kg 500 gm

$$15 \text{ Kg } 600 \text{ Gms} = 15600 \text{ Gms}$$

$$15600/6 = 2600 \text{ Gms} = 2 \text{ Kg } 600 \text{ Gms}$$

Each person will get 2 Kg 600 Gms of rice.

STD 4 Scholarship Exam Maths (2009) (9 solved)

2. ✓ $317 + 2002 = \dots\dots? \dots\dots$

(1) 2329

(2) 2312

~~(3)~~ 2319

(4) 2315

$$317 + 2002 = 317 + 2 + 2000 = 319 + 2000 = 2319$$

12. Shubham dug a pit of 7 m 95 cm along a road, and Ramesh dug 9 m 7 cm pit after it. Then what will be the length of the pit dug?

(1) 17.65 m

(2) 17.650 m

(3) 17.02 m

(4) 17.20 m

$$\begin{array}{r} 17.95 \\ + 9.07 \\ \hline 27.02 \end{array}$$

		7	.	9	5
+		9	.	7	0
	1	7	.	6	5

$$\text{Total length} = 17.65 \text{ m}$$

13. $9 \text{ Hrs } 41 \text{ Min} = ? \text{ Minutes}$

(1) 581

(2) 571

(3) 941

(4) 131

$$9 \text{ Hrs} = 9 \times 60 = 540 \text{ Mins, so total mins} = 540 + 41 = 581$$

24. 1 Hundred \times 8 Tens = How many Tens ?

- (1) 80 (2) 8000
 (3) 8 (4) 800

$1 \text{ Hundred} * 8 \text{ Tens} = 100 * 80 = 8000 = 800 \text{ Tens}$

26. If trees are planted at a distance of 2.5 m on both the sides of a road of 25 km, then how many trees will be planted ?

- (1) 20000 (2) 20002
 (3) 10000 (4) 10001

As the first tree will be planted at distance 0, 10001 trees on single side, 20002 trees on both sides.

29. Shyam bought a compass box for Rs. 32, a note-book for Rs. 11.25 and 2 pens worth Rs. 5.50 each. When he gave a 100 rupee note to the shopkeeper, how many rupees will the shopkeeper return him ?

- ₹(1) 51.25 (2) 54.25
 (3) 45.75 (4) 48.75

$32.00 + 11.25 + 2 * 5.50 = 32.00 + 11.25 + 11.00 = 54.25$

$100.00 - 54.25 = 45.75$

30. In an example of division sum, if the dividend is 108, divisor 15 and the remainder is 3, then what will be the quotient ?

(1) 18

(2) 8

(3) 7

(4) 9

$dividend = divisor * quotient + remainder$

$$108 = 15 * quotient + 3$$

(subtract 3 from both the sides)

$$108 - 3 = 15 * quotient + 3 - 3$$

$$105 = 15 * quotient$$

(divide by 15 on both the sides)

$$105/15 = (15 * quotient)/15$$

$$quotient = 7$$

38. The sum of the ages of Sameer and Raju is 35 years. If Raju is younger than Sameer by 7 years, then what is Sameer's age ?

(1) 28 years

(2) 14 years

(3) 21 years

(4) 17 years

Assume Samir's age is x , so Raju's age will be $x - 7$

$$Sum\ of\ their\ ages = x + x - 7 = 35$$

$$Hence\ 2 * x - 7 = 35$$

(Add 7 on both sides)

$$2 * x - 7 + 7 = 35 + 7 = 42$$

$$Hence\ 2 * x = 42$$

(Divide by 2 on both sides)

$$(2 * x / 2) = 42 / 2\ so\ x = 21,\ so\ Samir's\ age\ is\ 21.$$

45. The capacity of a bottle is 750 ml. How many bottles will be required to fill 9 litres of medicine ?

(1) 7

(2) 9

(3) 10

~~(4) 12~~

9000
750

1 bottle = 750 mL

4 bottles = 3000 mL = 3 litres

for 9 litres, $4 \times 3 = 12$ bottles are required.

50. If each child collects 49 seeds, then how many seeds will be collected by 346 students of a school ?

(1) 16954

(2) 12845

(3) 18994

(4) 16054

$346 \times 49 = 346 \times (50 - 1) = 346 \times 50 - 346 = 17300 - 346 = 16954$
