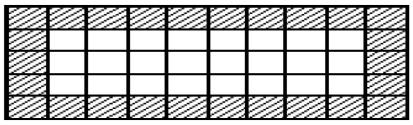
SECOND INTRA SCHOOL MATHEMATICS OLYMPIAD
ANSWER KEY
CLASS VII

1. $\frac{287}{7}$ **=41 (D)**

2. items produced in 60 sec =150

items produced in 10 sec = $\frac{150}{60} \times$ **10 =25 (B)**

3. The number of tiles = 26 (A)



4. divisor= 5, quotient = 4, remainder = 8

Number= (divisor× quotient + remainder)
= 2× (l0 + 5)
= (5×4+8)
= 28 (C)

5. 5 ×6= 30(5+6=11) (C)
1×30=30(1+30=31)
10×3=30(10+3=13)
2×15=30(2+15=17)

6. x+2x+3x=180° (angle sum property)
6x=180°
x=30°

z+x=180° (linear pair)
z = 180°-x
z =180°-30°
z=150° (A)

7. Area of a triangle= $\frac{1}{2}$ **× b×h**
$=\frac{1}{2}$ **× 4×3**
= 6 (C)

8. $=\frac{2}{3}$ **×12**
=8

$=\frac{1}{2}$ **of 8**
=4 (D)

9. Sakshi's present age=x
Four yrs ago her age=4+11
= 15
Two yrs later she will be=17(B)

11. not red balls=5
total balls = 6
probability= $\frac{5}{6}$ **(E)**

10. $\frac{9}{25}\times 100\% = 36\%$ **(C)**

12. $\frac{2}{3}$ **of** $\frac{3}{4} = \frac{2}{3}\times\frac{3}{4} = \frac{1}{2}$

$\frac{1}{2}$ **of 12=6 (D)**

13. Circle (B)

14. **x+(x+1) +(x+2) =9**

3x+3=90

3x=90-3

3x=87

x=29

largest number =29+2= 31(C)

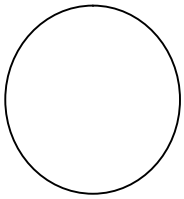
15. Area of a triangle= $\frac{1}{2}$ **b×h**

Area of 3 isosceles triangles=3× $\frac{1}{2}$ **×4×4**

= 3×8

=24(D)

16.



17. speed= distance/time

distance of bicycle in 3 hrs=15×3=45km

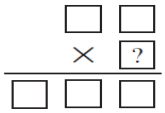
distance of bus in 3 hrs=195+45=240km

average speed of the bus in km/h=240÷3

=80km/h (B)

Total chords from each point=5+4+3+2+1=15(B)

18.



5 4

× 3(E)

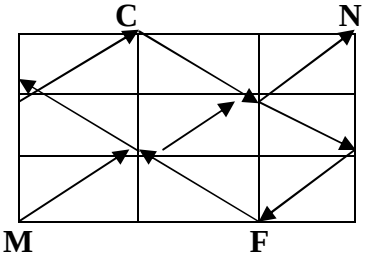
1 6 2

19. Odd numbered rows = 6×15 =90seats (1,3,5,7,9,11)

Even-numbered rows =5× 12=60 seats (2, 4, 6, 8, 10)

Total=150seats (A)

20.



MABCDEFADN=9(E)

Answers -7th

1. D	**2. B**	**3. A**	**4. C**	**5. C**
6. A	**7. C**	**8. D**	**9. B**	**10. A**
11. E	**12. D**	**13. B**	**14. C**	**15. D**
16. B	**17. B**	**18. E**	**19. A**	**20. E**