TEST 10

SECTION 1

1) 68,325 = (6 × 10,000) + (8 × 1,000) + (3 × 100) + (2 × 10) + (5 × 1)

2) 67

3) $\frac{75}{9} = 8\frac{3}{9} - 8\frac{1}{3}$

4) 9000 – 70 = 8,930

5) 8:00 a.m.
– :45 mins
7:15 a.m.

6) Mean = 9
Total = 9 × 6 = 54
54 + 30 = 84
New Mean = 84 ÷ 7 = 12

7) $26.65

8) 803 + 2□8 = 575 ; 803 – 575 = 228 ; □ = 2

9) 35.10 ÷ 5 = 7.02

10) 9630

11) Volume = 80,000cm^3
1,000cm^3 = 1 Litre
80,000 ÷ 1000 = 80 Litres

12) 13.6 + 7.9 + 25.4 + 11.1 = 58
Mean = 58 ÷ 4 = 14.5

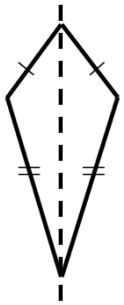
13) String A = 6.5cm
String B = 4.0cm
Total Length = 10.5cm ≈ 6cm

14) $6^3 \times 5 = 216 \times 5 = 1{,}080$

15) $\frac{5}{8}$ = 15 Litres
∴ Full = $\frac{8}{5} \times \frac{15}{1} = 24$

16) N × 4 = ? – 12 = 20
20 + 12 = 32
32 ÷ 4 = 8

17)



18) Equilateral Triangle

19) 6 faces, 12 edges and 8 vertices

20) Modal Height = 150cm

SECTION 2

21) N × 4 = ? ÷ 3 = 6 r 2
6 × 3 = 18
18 + 2 = 20
20 ÷ 4 = 5
N = 5

TEST 10

22) Frame of Cuboid:
4 × 15cm = 60cm
4 × 14cm = 56cm +
4 × 22cm = 88cm
Wire Needed = 204cm

Frame of Triangular Prism:
2 × 12cm = 24cm
4 × 9cm = 36cm +
3 × 20cm = 60cm
Wire Needed = 120cm

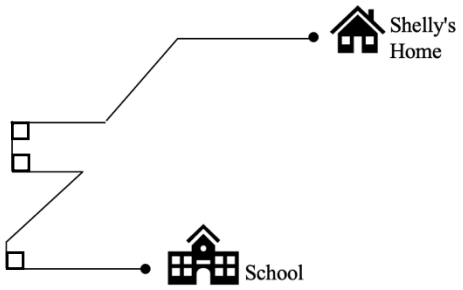
No. of Rolls Needed = 324cm ÷ 150cm
= 2 r 24cm
∴ 3 rolls of wire needed

23) Company X = 83 T.V.'s per day
Company Y = 67 T.V.'s per day
Together Total = 150 T.V.'s per day

3,450 T.V.'s ÷ 150 T.V.'s = 23 days

24) Area of Overlapping = 3cm × 6cm
= 18cm^2

25)



26) 5 Drinks = 5 × \$7 = \$ 35
5 Popcorn = 5 × \$15 = \$ 75 +
Already Spent = \$110
\$200.00 – \$6.90
= \$193.10 spent on snacks
\$193.10 – \$110.00
= \$83.10 still to spend
3 Nacho + Cheese = \$9.50 × 3 = \$28.50
6 Chocolate Bars = \$9.10 × 6 = \$54.60
\$83.10

27) $\frac{2}{3}$ distributed
∴ $\frac{1}{3}$ left
Lost = $\frac{5}{6} \times \frac{1}{3} = \frac{5}{18}$
Distributed + Lost = $\frac{2}{3} + \frac{5}{18}$
$= \frac{12}{18} + \frac{5}{18} = \frac{17}{18}$
Left in bag = $\frac{18}{18} - \frac{17}{18} = \frac{1}{18}$ = 8 marbles
Total No. of Marbles started with in bag 18 × 8 = 144 marbles

28) 16.896 ÷ 1.2 =

$$12 \overline{)\ 168.96}\quad 14.08$$

29) Area of 1 small Sq. = 3cm × 3cm = 9cm^2
Shape has 14 Sq. = 14 × 9cm^2
Area of Shape = 126cm^2

30) $6\frac{5}{12}$, $2\frac{5}{6}$, $1\frac{3}{4}$, $3\frac{1}{2}$

$\frac{5}{12} + \frac{10}{12} + \frac{9}{12} + \frac{6}{12}$
$= \frac{24}{12}$
$6\frac{5}{12}, + 2\frac{10}{12}, + 1\frac{9}{12} = 9\frac{24}{12} = 11$
Ans: $6\frac{5}{12}$, $2\frac{5}{6}$ and $1\frac{3}{4}$

31) 6.5kg potatoes @ \$4.50 per kg = \$ 29.25
$2\frac{1}{2}$kg tomatoes @ \$12.00 per kg = \$ 30.00
7.35kg onions @ \$5 per kg = \$ 36.75
Total = \$ 96.00
$12\frac{1}{2}$% V.A.T. = \$ 12.00
\$108.00

Change = \$120,00 – \$108.00
= \$12.00

TEST 10

32) Peri. Of Rect. = (L + W) × 2
= (25cm + 15cm) × 2
= 40cm × 2 = 80cm
Peri. Of Sq. = 80cm
Side = 80cm ÷ 4 = 20cm
Area of Sq. = 20cm × 20cm = $400cm^2$

33) 3 notebooks + 2 pens = \$90
4 notebooks + 2 pens = \$100
∴ 1 notebook = \$100 – \$90 = \$10
1 pen = (\$90 – \$30) ÷ 2
= \$60 ÷ 2 = \$30

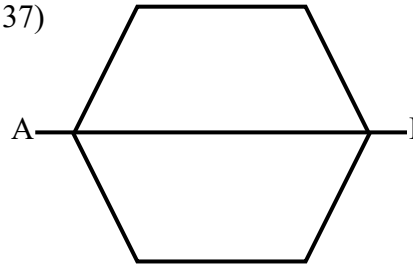
5 notebooks = \$10 × 5 = \$ 50
3 pens = \$30 × 3 = \$ 90
Total = \$140
Calculate for 1 notebook as shown above And for 1 pen as shown above. Take the price of one and multiply it by the amount needed.

34) Differences
(i) Shape R – All sides are equal/
Shape Q – Adjacent Sides Equal
(ii) Shape R – 2 pairs of parallel sides
Shape Q – no parallel sides.

35) Mean = 65 marks
Total = 65 × 5 = 325 marks
New Mean = 65 + 5 = 70
New Total = 70 × 6 = 420 marks
Marks needed = 420 – 325 = 95 marks

36) No. of hours parked from 9:23a.m. to 1:45p.m. = 4 hours 22 mins
4 hrs. 22 mins. = 5 hours payment
= 5 × \$6.50
= \$32.50

37)



Hexagon

38) 9 drawings × 5 cars = 45 cars
∴ Ford = 55 – 45 = 10 cars
10 cars ÷ 5 = 2 drawings for Ford

39) V.A.T. = $12\frac{1}{2}\% = \frac{1}{8}$
∴ \$4,500 VAT inclusive = $\frac{8}{8} + \frac{1}{8} = \frac{9}{8}$
Dis. Price = $\frac{8}{9} \times \frac{4,500}{1}$ = \$4,000

\$4,000 + \$1,000 = \$5,000 Original Price

40) Isabelle won the prize
She sold = 100 boxes – 10 unsold boxes
= 90 boxes

TEST 10

SECTION 3

41) 2 doz. Sweet pepper = 2 × 12
= 24 s.p. seedlings
4 doz. Lettuce = 4 × 12
= 48 lettuce seedlings
Total Cost of S.P. and Lett. = $120
6 S.P. seedling = $18
∴ 1 S.P. seedling = $18 ÷ 6
= $3 per seedling

Original purchase 24 S.P. + 48 lettuce = $120
(24 × $3) + 48 lettuce = $120
$72 + 48 lettuce = $120
48 lettuce = $120 – $72
48 lettuce = $48
∴ 1 lettuce = $48 ÷ 48 = $1

Already Spent = $120 + $18
= $138
Add 12 S.P. = 12 × $3 = $ 36
Add 24 lettuce = 24 × $1 = $ 24
New Total $198

42) Varun – 3 incorrect
∴ Corr. = 80 – 3 = $\frac{77}{80} \times \frac{100}{1}$ = 96.25%
Jaden – 5 incorrect
∴ Corr. = 80 – 5 = $\frac{75}{80} \times \frac{100}{1}$ = 93.75%
Omg – 4 incorrect
∴ Corr. = 80 – 4 = $\frac{76}{80} \times \frac{100}{1}$ = 95%

Varun made a total of 77 correctly Spelt which is $\frac{77}{80}$ multiply by 100 to Calculate a percentage of 96.25% so he Made greater then 95% which qualifies Him for the next Spelling Bee rounds.

43) Area of Floor = L × W = 23m × 18m
= 414m^2
Area of Workstations = 65m^2 × 2
= 130m^2
Area to be tiled = 414m^2 – 130m^2
= 284m^2
Area of tiles to be used = 0.3m × 0.3m
= 0.09m^2
No. of tiles needed = 3,155$\frac{1}{2}$ = 3,156 tiles
11 tiles per box
∴ No. of boxes = 3,156 ÷ 11
= 286 r 10 tiles
= 286 + 1 extra box
= 287 boxes of tiles

44) Mean Age = 11 years 1 month
× 5
55 years 5 months

Nick = 55 yrs. 5 mths. – (11yr. 3mths. + 10yr. 9mths. + 10yr. 7mths. + 11yr. 7mths.)
= 55 yrs. 5 mths. – 44 yrs. 2 mths.
= 11 yrs. 3 mths.

Modal Age = 11yrs. 3 mths.

45)

	Edges	Faces	Vertices
Cylinder	2	3	0
Sq. Based Pyramid	8	5	5
Triangular Prism	9	5	6
Cuboid	12	6	8