TEST 14

SECTION 1

1) $3{,}130.78 = \frac{8}{100}$

2) $7\underline{5}18 \approx 7500$

3) $180 - 65 = 40 + \underline{75}$

4) 9^{+5}, 14^{+6}, 20^{+7}, $\mathbf{27^{+8}}$, 35^{+9}, 44

5) $0.75 = \frac{75}{100} = \frac{3}{4}$

$\frac{3}{4} \times \frac{280}{1} = 210$

6) $\frac{5}{12} + \frac{1 \times 4}{3 \times 4} = \frac{5}{12} + \frac{4}{12} = \frac{9}{12}$

$\frac{12}{12} - \frac{9}{12} = \frac{3 \div 3}{12 \div 3} = \frac{1}{4}$ juice left in carton

7) Bob $= 2 \times \$5 = \$10.00$
$ 3 \times 10c = \underline{\$00.30} +$
$ \$10.30$

Terry $= 1 \times \$10 = \$10.00$
$ 2 \times 25c = \underline{\$00.50} +$
$ \$10.50$

Total $= \$10.30$
$ + \underline{\$10.50}$
$ \$20.80$

8)
$ 358$
$\times \underline{19}$
$ 3580$
$+ \underline{3222}$
$ 6802$

9) Bill $= \$18.75$
$\therefore$ Change $= \$20.00$
$ - \underline{\$18.75}$
$ \$1.25 \div .25 = 5$ (25c coins)

10)
$ 2\,0\,2\,5 \qquad 2811 \qquad \square = 8$
$+ 7\square 6 \qquad - \underline{2025}$
$ \underline{2\,8\,1\,1} \qquad \underline{786}$

11) Perimeter = 16 sides of small sq. × 2cm
$ = 32$cm

12) 7 apples = 1kg 400g = 1400g
$\therefore$ 1 apple = 1400 ÷ 7 = 200g
To balance scale to read 1kg/1000g
1400g – 1000g = 400g removed
400 ÷ 200 = 2 apples

13) 18 days

14) 2,450ml ÷ 1000 = 2.450 litres

15) Faces $ = 5$
Vertices $= \underline{+ 6}$
Total $ = \underline{11}$

16)

17) 3

18) Language ⧀ 5

19) Modal = Action Movies

20) Mean = 4 + 8 + 5 + 3 + 6 + 4 = 30 ÷ 6 = 5
Jerry = 5

SECTION 2

21) Oranges + Grapefruits = 360
 Oranges = 3x
 Grapefruits = x
 Total = 3x + x = 4x = 360
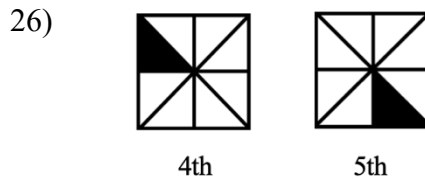 x = 360 ÷ 4 = 90
 Oranges = 90 × 3 = 270 oranges

22) Mean Time = 16.5
   14.9
   17.3
   16.9
   14.4
   80.0 ÷ 5 = 16 seconds

23) Total Avocadoes = 428
 1 Box = 15 Avocadoes
 No. of boxes = 428 ÷ 15 = 28 full boxes
 + 1 extra box for the 8 extra Avocadoes.
 Total boxes = 28 +1 = 29

24) Concert starts at   7:00 p.m.
 First Part of Concert   +   55 mins
              7:55 p.m.
 Intermission =   15 mins
              $7^{+1}:(70)^{-60}$
              8:10 p.m.
 Second Part of Concert + 1:20
 Concert Ended   9:30 p.m.

25)

26)

 4th   5th

 The pattern is: Skip 1, colour. Skip 2,
 Colour. Skip 3, colour. You keep adding
 1 extra to skip and then colour the next
 triangle.

27) 12 spaces = 360°
 ∴ 1 space = 360° ÷ 12 = 30°
 Movement from 8 to 5 anti-clockwise
 = 9 spaces = 9 × 30° = 270°
 No. of 90° = 270° ÷ 90° = 3

28) 8 of Triangle Q will Cover the Sq.

 Area of Sq. = 4 blocks × 4 blocks
        = 16 blocks
 Area of Tri. = 2 blocks
 No. of Tri. = 16 ÷ 2 – 8

29) Vehicles Parked = 125
 Car = $\frac{2}{5} \times \frac{125}{1}$ = 50
 Remaining Vehicles = 125 – 50 = 75
 Pick-Ups = 20% of 75 = $\frac{20}{100} \times \frac{75}{1}$ = 15
 SUV = 75 – 15 = 60
 Decimal Fraction to represent SUV:
 $\frac{60 \div 5}{125 \div 5} = \frac{12 \times 4}{25 \times 4} = \frac{48}{100}$ = 0.48

30) Book = 250 pages
 $\frac{1}{2}$ hr = 30 mins = 60 pages
 ∴ 1 min = 60 pg. ÷ 30 mins = 2 pgs.

 Pages Left to read = 250 – 60 = 190 pgs.
 Time to read 190 pgs. = 190 ÷ 2
              = 95 mins
 95 mins = $1\frac{35}{60}$ = $1\frac{7}{12}$ hr.

TEST 14

31)

No. of Faces	No. of Edges	No. of Vertices
5	12	8

32) Mean = 70 runs

Total in 3 innings = 70 × 3 = 210 runs

New Mean = 70 + 3 = 73 runs

Total in 4 innings = 73 × 4 = 292 runs

Runs made in 4th inning = 292 –210

= 82 runs

33)

Cups of Milk	2	4	6	**8**	10	12
Flour	6	**12**	18	24	30	**36**

34)

1	4	9	**16**	25	36	49	64	81

Squares of Numbers

35) Rotten = 20%

Good = 100% – 20% = 80%

Kept = $\frac{1}{4}$ of 80% = $\frac{1}{4} \times \frac{80}{100} = \frac{1}{5}$ or 20%

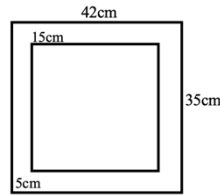Rotten and Kept = 20% + 20% = 40%

Remainder Sold = 300 pepper = 60%

60% = 300

$\frac{60}{100}$ = 300

Total Peppers Harvested

= (300 ÷ 60) × 100 = 5 × 100 = 500 pep.

36)

Frame = 42cm × 35cm

Photo = (42 –10) × (35 – 10)

= 32cm × 25cm

Area of Frame = L × W = 42cm × 35cm

= 1,470cm^2

Area of Photo = L × W = 32cm × 25cm

= 800cm^2

Area of Border Around Frame

= 1,470cm^2 – 800cm^2 = 670cm^2

37) Discount = $12\frac{1}{2}\% = \frac{25}{200} = \frac{1}{8}$ off

$\frac{8}{8} - \frac{1}{8} = \frac{7}{8} = \frac{7}{8} \times \frac{\$368}{1} = \$322$

38)
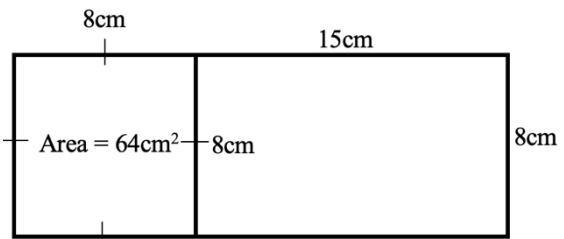
Area of Sq. = 64cm^2

1 side = $\sqrt{64}$ = 8cm

Width of Rect. = 8cm

∴ Perimeter = (15 + 8) + 8 + (15 + 8) + 8

= 62cm

39) Total To Repay = $16,000

Principal = $10,000

∴ S.I. = $16,000 – $10,000 = $6,000

Years for loan = $\frac{100 \times S.I.}{Principal \times Rate}$

= $\frac{100 \times \$6,000}{\$10,000 \times 12}$ = 5 years

40) 2018 Mary = 22 years

2018 Pam = $\frac{1}{2}$ of 22 = 11 years

2019 = 33 + 2 = 35 yrs.
2020 = 35 + 2 = 37 yrs.
2021 = 37 + 2 = 39 yrs.
2022 = 39 + 2 = 41 yrs.
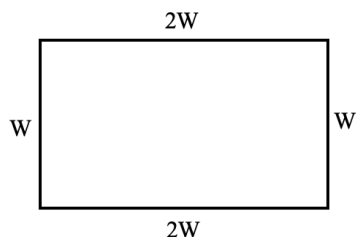2023 = 41 + 2 = 43 yrs.
2024 = 43 + 2 = 45 yrs.

OR

22 + 11 = 33 yrs.
45 – 33 = 12 yrs.
12 yrs. ÷ 2 = 6 yrs.
2018 + 6 yrs. = 2024

SECTION 3

41) Total Distance in 5 laps = 1.2km
$\qquad$ = 1200m
1 lap = 1,200 ÷ 5 = 240m
∴ Peri. of field = 240m

6W = 240m
W = 240m ÷ 6 = 40m

Length of Rect. = 40m × 2 = 80m
Width of Rect. = 40m
Area of Field = L × W = 80m × 40m
$\qquad$ = 3,200m^2

42) Jadon left with 6 free games
Offer = Buy 3 games get 2 games free
∴ 6 free games ÷ 2 = 3 amts. of purchases
Each purchase = 3 games bought
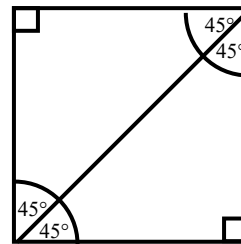∴ 3 purchases = 3 × 3 = 9 games bought
9 games = $1,980
∴ 1 game = $1,980 ÷ 9 = $220

43) 5 rulers + 3 pencils = $35.75
3 rulers + 1 pencil = $16.25
∴ 2 rulers + 2 pencils = $35.75 – $16.25
$\qquad$ = $19.50

Ruler = x
Pencil = 2x
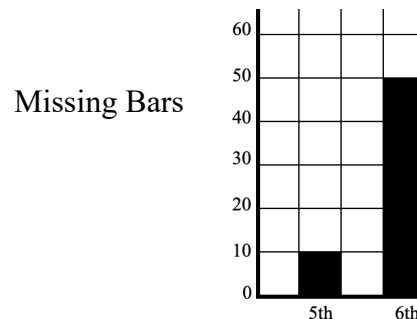∴ 2 rulers = x + x $\quad$ = 2x
$\quad$ 2 pencils = 2x + 2x = 4x
$\qquad\qquad$ 6x = $19.50
x = $19.50 ÷ 6 = $3.25
ruler = $3.25
pencil = ($3.25 × 2) = $6.50
1 ruler + 1 pencil = $3.25 + $6.50 = $9.75
32 (of 1 pencil + 1 ruler) = $9.75
$\qquad\qquad$ × 32
$\qquad\qquad$ $ 312

44) 2 identical congruent, right-angles,
Isosceles triangles will form a square.

45) Mean after 4 innings = 70 + 30 + 50 + 90
$\qquad$ = 240 ÷ 4 = 60 runs
Mean after 5th innings = 60 – 10 = 50 runs
$\qquad$ Total = 50 × 5 = 250 runs
Mean after 6th innings = 50 runs
$\qquad$ Total = 50 × 6 = 300 runs

Missing Bars

Modal number of runs = 50