

TEST 15

SECTION 1

1) $8 = 80,000$

2) 5

3) $\frac{41}{7} = 5\frac{6}{7}$

4) $35.24 \div 5 = 7.048$

5) $(12 \times 10) + (12 \times 4) = 12 \times \boxed{14}$

6) $7^3 + \sqrt{144} = 343 + 12 = 255$

7) $4 - \frac{5}{4} = \frac{16}{4} - \frac{5}{4} = \frac{11}{4} = 2\frac{3}{4}$

8) $\$20 + \$10 + \$5 = \35.00
 $10c + 25c + 25c = \underline{\$00.60} + \underline{\$35.60}$

9)
$$\begin{array}{r} 315 \\ \times \quad 24 \\ \hline 7,560 \end{array}$$

10)
$$\begin{array}{r} 72\boxed{7} \quad 11 \quad 911 \\ + 1\boxed{4} \quad - 4 \quad - 727 \\ \hline 911 \quad \quad \quad 7 \quad 184 \end{array}$$

$$\begin{array}{r} 72\boxed{7} \\ + 1\boxed{84} \\ \hline 911 \end{array}$$

11) 1 length = 2cm
Route AB = 12 lengths $\times 2 = 24$ cm

12) $\boxed{1:50}$

13) 6th December, 2020 ($17-11 = 6$)

14) Volume of 1 cube = $3 \times 3 \times 3 = 27\text{cm}^3$
Volume of solid = 32 cubes $\times 27$
 $= 864\text{cm}^3$

15) B,D

16)  Trapezium

17) C

18) Chocolate

19) $80 \div 20 = 4$  = 4 persons

20) Mean = $20 + 24 + 18 + 21 + 37 = 120 \div 5$
 $= 24$

SECTION 2

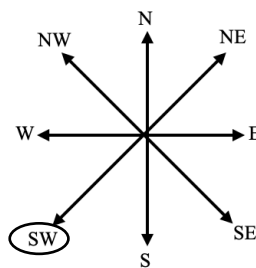
21) 5 – 12-Seater Maxi-Taxis = 5×12
 $= 60$ passengers

1 Maxi-Taxi rental = \$1,200
 $\therefore 5$ Maxi-Taxi rentals = $\$1,200 \times 5$
 $= \$6,000$

Money for tickets = $\$10,500 - \$6,000$
 $= \$4,500$

60 people = \$4,500
 $\therefore 1$ person = $\$4,500 \div 60 = \75 per ticket

22)



North-East

TEST 15

$$23) \frac{3}{5} \text{ full} = 60 \times 80 \times 30 = 144,000 \text{cm}^3$$

$$144,000 \div 1,000 = 144 \text{ Litres}$$

$$\frac{3}{5} = 144 \text{ Litres}$$

$$\therefore \frac{5}{5} = \frac{5}{3} \times \frac{144}{1} = 240 \text{ Litres}$$

24)

Item	Quantity	Unit Cost	Total Cost
Pigeon Peas	$3\frac{1}{2}$	\$30 per kg	\$105.00
Callaloo Bush	4 Bun.	\$7.50 per Bun.	\$30.00
Tomatoes	3 kg	\$15.00 per kg	\$45.00
Pumpkin	3 kg	\$4.50 per kg	\$13.50
		Total	\$193.50

$$25) 1 \text{ 🏠} = 10 \text{ Houses}$$

$$\therefore 20 \text{ 🏠} = 20 \times 10 = 200 \text{ Houses}$$

$$\text{Jaguar Drive} = 4 \times 10 = 40 \text{ Houses}$$

$$= \frac{40}{200} \times \frac{100}{1} = 20\%$$

$$26) \text{Adult Ticket} = \$120$$

$$\text{Child Ticket} = \$75$$

$$\text{Children's Ticket Total} = \$7,500$$

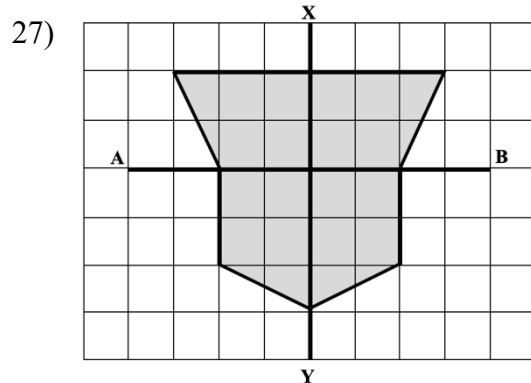
$$\text{Adult Tickets} = \$31,500 - \$7,500$$

$$= \$24,000$$

$$\text{No. of Adults} = \$24,000 \div \$120 = 200$$

$$\frac{2}{3} \text{ Patrons} = 200$$

$$\text{Total Patrons} = \frac{3}{2} \times \frac{200}{1} = 300$$



Pentagon & Trapezium

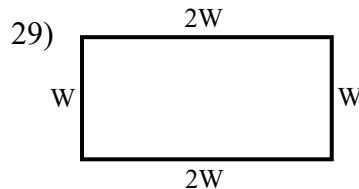
$$28) 1 \text{ container} = 8.125 \text{ Litres} = 8125 \text{ml}$$

$$1 \text{ cup} = 325 \text{ml}$$

$$\text{No. of cups} = 8125 \div 325 = 25$$

$$\text{Containers needed for 100 cups} = 100 \div 25$$

$$= 4 \text{ Containers}$$



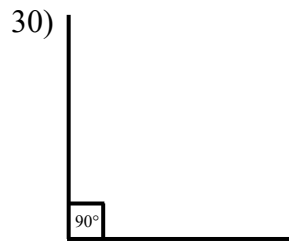
$$\text{Perimeter} = 72 \text{cm}$$

$$6W = 72 \text{cm}$$

$$W = 72 \div 6 = 12$$

$$\text{Length} = 12 \times 2 = 24 \text{cm}$$

$$\text{Width} = 12 \text{cm}$$



$$31) 24 - (11 + 3 + 6) = 24 - 20 = 4$$

$$\text{Size } 2 = ||$$

$$\text{Size } 3\frac{1}{2} = |||| 4$$

$$32) \text{ Brian pick } x \text{ plums}$$

$$\text{Green plums} = \frac{3}{5}$$

$$\therefore \text{ Ripe plums} = \frac{2}{5}$$

$$\frac{7}{8} \text{ of ripe plums were good}$$

$$\therefore \frac{7}{8} \text{ of } \frac{2}{5} \text{ are good plums}$$

$$\frac{7}{8} \times \frac{2}{5} = \frac{14}{40} x \text{ are good plums}$$

$$\therefore \frac{14}{40} x = 35$$

$$\therefore x = \frac{40}{14} \times \frac{35}{1}$$

$$= \frac{20}{7} \times \frac{35}{1} = \frac{700}{7} = 100 \text{ plums}$$

TEST 15

33) Total Weight of 3 boys = 91.3kg

Alex weighs 1.3kg more

$$91.3\text{kg} - 1.3\text{kg} = 90\text{kg}$$

$$90\text{kg} \div 3 \text{ boys} = 30\text{kg}$$

$$\text{Alex} = 30\text{kg} + 1.3\text{kg} = 31.3\text{kg}$$

34) (b) 7,380 ends with a '0'. Multiples of 5 end with a '5' or a '0'. So Cade was able to identify 7,380 as the only number in the set which ends with a '0'.

35) Arrival Time = $^{22}23:05^{+60}$

$$\begin{array}{r} \text{Flight Time} = \quad 4:45 - \\ \quad 18:20 \\ - \quad 12:00 \\ \hline \quad 6:20 \text{ p.m.} \end{array}$$

36) Collection = 165 stamps

Gave Lisa $33\frac{1}{3}\% = \frac{1}{3}$ of 165

$$= \frac{1}{3} \times \frac{165}{1} = 55 \text{ stamps}$$

$$\text{Jill Kept} = 165 - 55 = 110 \text{ stamps}$$

37) $\sqrt{81} + 8, \sqrt{64} + 7$

38) Cost Price = \$2,460

$$\text{Profit} = 75\% = \frac{75}{100} \times \$2,460 = \$1,845$$

$$\begin{aligned} \therefore \text{Selling Price} &= \text{C.P.} + \text{Pro.} \\ &= \$2,460 + \$1,845 \\ &= \$4,305 \end{aligned}$$

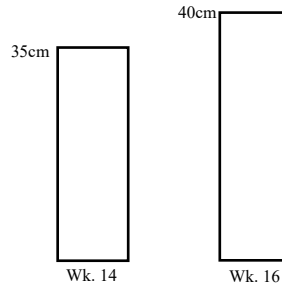
39) Nathan – 12 years

Mary – 12 years + 9 years = 21 years

Robert – 12 years – 6 years = 6 years

Tyler = $21 \div 3 = 7$ years

40)



$$\begin{aligned} \text{Mean Height} &= 5 + 10 + 15 + 20 + 25 + \\ &\quad 30 + 35 + 40 = 180\text{cm} \\ &= 180 \div 16 = 11.25\text{cm} \end{aligned}$$

SECTION 3

41) 1 Cube = 6 faces

$$\text{Area of face} = 20 \times 20 = 400\text{cm}^2$$

$$6 \text{ faces} = 400 \times 6 = 2,400\text{cm}^2$$

1 Cubes = 6 faces

$$\text{Area of face} = 10 \times 10 = 100\text{cm}^2$$

$$6 \text{ faces} = 100 \times 6 = 600\text{cm}^2$$

Area of 1 sheet Bristol board

$$= 80\text{cm} \times 70\text{cm} = 5,600\text{cm}^2$$

$$\therefore 1 \text{ sheet} = 2 \text{ large Cubes} = 2,400 \times 2 = 4,800\text{cm}^2$$

$$1 \text{ small Cubes} = 600\text{cm}^2$$

$$2 \text{ small faces} = 600 \times 2 = 1,200\text{cm}^2$$

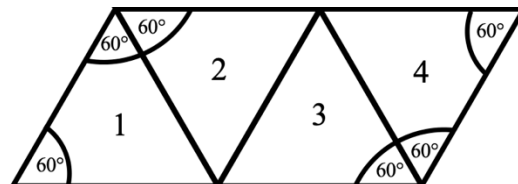
3 sheets of Bristol Board = 3×2

= 6 Large Cubes

$3 \times 1 = 3$ small Cubes

Plus $3 \times 2 = 6$ faces = 1 small cube

42)



TEST 15

43) $40 \text{ hrs} \times \$40 = \$1,600$
Overtime Rate = Time and a Half
 $= \$40 + \$20 = \$60$
40 hrs Regular Time = \$1,600
Over Time = Tues = 4hrs
Wed = $\frac{1}{2} \times \frac{4}{1} = 2\text{hrs}$
Fri = $3 \times 2\text{hrs} = 6\text{hrs}$
Total O.T. hrs = $4 + 2 + 6 = 12\text{hrs} \times \60
 $= \$720$
1 Week Total Earnings
Regular Time = \$1,600
Over Time = \$ 720
\$2,320

44) Original Price = \$4,000
25% Discount = $\frac{25}{100} \times \frac{\$4,000}{1} = \$1,000$ off
Sale Price = $\$4,000 - \$1,000 = \$3,000$
Further Discount = 20%
 $= \frac{20}{100} \times \$3,000 = \$600$
New Discounted Price = $\$3,000 - \600
 $= \$2,400$
V.A.T. $12\frac{1}{2}\% = \frac{1}{8} \times \frac{\$2,400}{1} = \$300$
Total Cost V.A.T. inclusive
 $= \$2,400 + \300

Down-payment = \$300
Balance = $\$2,700 - \$300 = \$2,400$
6 equal Instal. = $\$2,400 \div 6$
 $= \$400$ monthly

45) Absent:
Mon. - 25
Tue. - 25
Thurs. - 25
Fri. - 25
Total 100

Average Absent = 23 pupils
 \therefore Total Abs. = $23 \times 5 = 115$ pupils
Wed. = $115 - 100 = 15$ pupils

$115 \text{ pupils} = 33\frac{1}{3}\% = \frac{1}{3}$ School Pop.
 $\frac{115}{1} \times \frac{3}{1} = 345$ Full School Population

Fraction of School Pop. Absent on Fri.
 $= \frac{45 \div 15}{345 \div 15} = \frac{3}{23}$
 \therefore Fraction Present on Fri = $\frac{23}{23} - \frac{3}{23} = \frac{20}{23}$