TEST 3

SECTION 1

1) 8̲62,315 Place Value is:
   Hundreds of Thousand

2) 9

3) $120\% = \frac{120}{100} = 1\frac{20}{100} = 1\frac{1}{5}$

4) $4.28 \div 4 = 1.07$

5) $9 \times (12 - 5) = 9 \times \underline{7}$

6) Oct 26th, 2019 to Nov 18th, 2019 = 23

7) Volume of Cuboid = Area of Face $\times$ 23cm
   $= 1,000\text{cm}^2 \times 23\text{cm}$
   $= 23,000\text{cm}^3$

8) $8^2 = 64$
   $\therefore 64 - 53 = 11$

9) Ate $= \frac{3}{14}$
   Gave Away $= \frac{2}{7}$
   $\therefore$ Ate + Gave Away $= \frac{3}{14} + \frac{2}{7} = \frac{3}{14} + \frac{4}{14} = \frac{7}{14}$
   Fraction Left $= \frac{14}{14} - \frac{7}{14} = \frac{7}{14} = \frac{1}{2}$

10) Tom = 12 marbles
    John = $12 \times 3 = 36$ marbles
    Jack = $36 \div 2 = 18$ marbles
    Total Marbles among boys = $12 + 36 + 18$
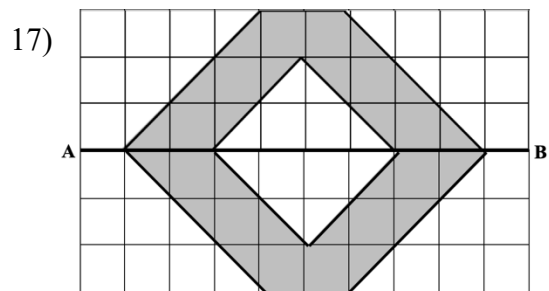 $= 66$ marbles

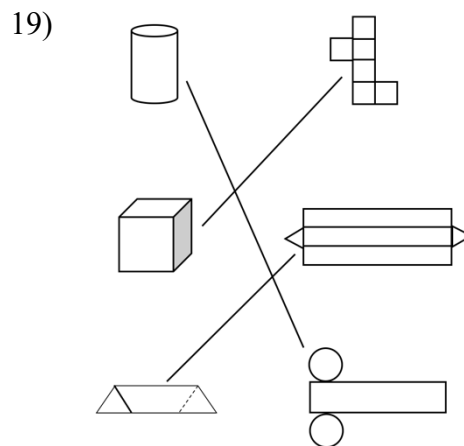11) Distance = 5cm

12) Trapezium

13) Modal height = 143cm

14) Peri. Of Square = Side $\times$ 4 = 20cm
    1 Side = 20 $\div$ 4 = 5cm
    Area of Square = S $\times$ S = 5cm $\times$ 5cm
    $= 25\text{cm}^2$

15) $\$5̲63.75 \approx \$600.00$

16) $864 \div 72 = 12$
    Divisor = 12

17)

18) $\boxed{\cdot\cdot} = \$5$
    $6 \boxed{\cdot\cdot} = \$5 \times 6 = \$30$
    Gary - $\$65 - \$30 = \$35$
    Gary = $\$35 \div 5 = $

19)

20) No. of Pupils = $10 + 12 + 7 + 8 = 27$

TEST 3

SECTION 2

21) $\frac{2}{3} = \$138$

All Money $= \frac{3}{2} \times \frac{138}{1} = \$207$

22) 2008-Brother $= \frac{1}{2}$ of John's Age
2010-Brother = 14 years
2008-Brother = 14 – 2 years = 12 years
∴ John = 12 yrs. × 2 = 24 yrs. in 2008
2010- John = 24 yrs. + 2 yrs. = 26yrs.

23) 30 mins $= \frac{1}{3}$ full
30 mins × 3 = 90 mins = Full Tank
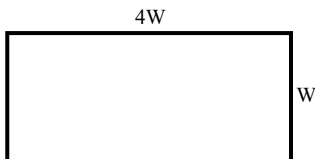∴ 52 mins $= \frac{52}{90} = \frac{26}{45}$ fraction of tank full

24) Area of Sq. = 100cm^2
Area of Rect. = 100cm^2
$= 2 \times 50/\,4 \times 25/5 \times 20$

4W

W

∴ 5 × 20 = 100cm^2
Width = 5cm
Length = (4 × 5) 20cm
Peri of Rect. = (20cm + 5cm) × 2
$= 25cm \times 2 = 50cm$

25) Local Calls = 310 mins × .30 per min
$= \$93$
Foreign Calls $= 1\frac{1}{2}$ hrs.
= 90 mins × 1.10 per min
= \$99
Total = 93 + 99 = \$192
V.A.T. $= 12\frac{1}{2}\% = \frac{1}{8} \times \frac{\$192}{1} = \$24$
Total V.A.T. inclusive = \$192 + \$24
$= \$216$

26) 1 package = 20cm + 13cm = 33cm ribbon
13 packages = 33cm × 13pk.
= 429cm ribbon used
Roll of Ribbon = Ribbon Used + Ribbon Left
= 429cm + 41cm = 470cm

27) 40 mins = 1-90° turn
$3\frac{1}{3}$ hrs. = 200 mins
No. of 90° turns in 200 mins = 200 ÷ 40
= 5-90° Turns

Change $3\frac{1}{3}$ hrs to minutes. Since 40 minutes equal 1-90° turn, divide 200 mins by 40 mins. The answer will be the number of 90° turns made in the $3\frac{1}{3}$ hrs.

28) Simple Interest $= \frac{Pr. \times Rate \times Time}{100}$
$= \frac{\$12,000 \times 12 \times T}{100} = \$7,200$
Time $= \frac{S.I. \times 100}{Pr \times Rate} = \frac{\$7,200 \times 100}{\$12,000 \times 12} = 5$ years

Monthly Instal. = (Pr. + S.I.) ÷ (5 × 12 months)
= (\$12,000 + \$7,200) ÷ 60
= \$19,200 ÷ 60 = \$320

29) Mean = 75 marks
Total in 4 tests = 75 mks. × 4 = 300 marks

New Mean = 85 marks
New Total = 85 mks. × 5 test = 425 marks
Extra Marks Needed = 425 – 300
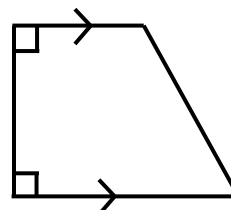=125 marks

No, Kyle cannot increase his mean to 85
After writing his 5th test. To do so he will
Need a score of 125 marks in the 5th test.
The test is marked out of 100, so this will
Not be possible.

30)

Trapezium

TEST 3

31) Cade   20.8 mins   3rd
   Isabelle   21.2 mins   4th
   Chayanne   20.5 mins   2nd
   Asia-Lee   20.0 mins   1st

32) Cupcakes baked = 9 doz. = 9 × 12 = 108
    Sold $= \frac{1}{3} \times \frac{108}{1} = 36$ cupcakes @ $12 each
            = $432
    ∴ Remainder = 108 – 36 = 72 cupcakes
    $\frac{5}{12}$ remainder donated $= \frac{5}{12} \times \frac{72}{1}$
                 = 30 cupcakes
    Now Left = 72 – 30 = 42 cupcakes
    3 in package = 42 ÷ 3
                = 14 packs @ $9 per pack
                = $126
    Money Made = $432 + $126 = $558

33)
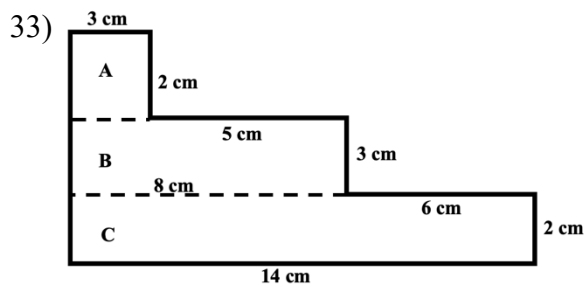
    Area of Rect. A = L × W = 3cm × 2cm
                   = 6cm^2
    Area of Rect. B = L × W = 8cm × 3cm
                   = 24cm^2
    Area of Rect. C = L × W = 14cm × 2cm
                   = 28cm^2
    Area of Shape = 6cm^2 + 24cm^2 + 28cm^2
                = 58cm^2

34) Shrimp - $2\frac{1}{2}$kg @ $35 per 500g
    = $35 × 5 = $175
    King Fish - 3kg @ $40 per kg
    = $40 × 3 = $120
    Carite Fish - $2\frac{1}{2}$kg @ $30 per kg
    = $30 × 2.5 = $75
    Total Bill = $175 + $120 + $75 = $370
    Change = $400 – $370 = $30

35) 🧍 = 4 pupils
    All pupils = 10 × 4 = 40
    Percent to represent Volleyball
    $= \frac{6}{40} \times \frac{100}{1} = 15\%$

36) (i) Cuboid (ii) Triangular Prism

37) Volume = 4,500cm^3
    36 Cubes = 4,500cm^3
    1 Cube = 4,500 ÷ 36 = 125cm^3
    1 side Cube = $^3\sqrt{125}$ = 5cm
    ∴ Height of Model = 5cm × 6 = 30cm

38)

Item	Quantity	Unit Price	Cost
Tomatoes	4kg	$8.00 per kg	$32.00
Sweet Potato	10kg	($55.00 ÷ 10) per kg	$55.00
Cassava	4kg	$7.11 per kg $7.11 × 4	$28.44
		Sub Total	$115.44
		V.A.T. 12$\frac{1}{2}$%	$\frac{1}{8} \times \frac{115.44}{1} =$ $14.43
		Total	$115.44 + $14.43 =129.87

39) Std. 4 = 62 lunches
    Std. 5 = 43 lunches
    Total Std. 4 + 5 = 62 + 43 = 105 lunches
    $\frac{3}{5}$ = 105 lunches
    All Lunches $= \frac{5}{3} \times \frac{105}{1} = 175$ lunches
    Std. 2 = 175 – (22 + 25 + 62 + 43)
          = 175 – 152 = 23 lunches

40) Spoilt $= \frac{1}{4}$
    Green $= \frac{2}{5}$
    Spoilt + Green $= \frac{1}{4} + \frac{2}{5} = \frac{5}{20} + \frac{8}{20} = \frac{13}{20}$
    Ripe $= \frac{20}{20} - \frac{13}{20} = \frac{7}{20}$
        $= \frac{7}{20} = 35$ mangoes
    All $= \frac{20}{7} \times \frac{35}{1} = 100$ mangoes purchased

TEST 3

SECTION 3

41) Total Earnings for June = $5,000
    Weekly = 8 hours per day × 5 days
        = 40 × $20 = $800
    Monthly Regular Time = $800 × 4
                = $3,200
    Overtime = $5,000 – $3,200 = $1,800

    O.T. rate Saturday = Time and a Half
        $= 1\frac{1}{2} \times \$20$
        $= \frac{3}{2} \times \$20$
        $= \$30$
    O.T. rate Sunday = Double Time
        = 2 × $20 = $40
    Hrs. O.T. for Saturdays = 2x
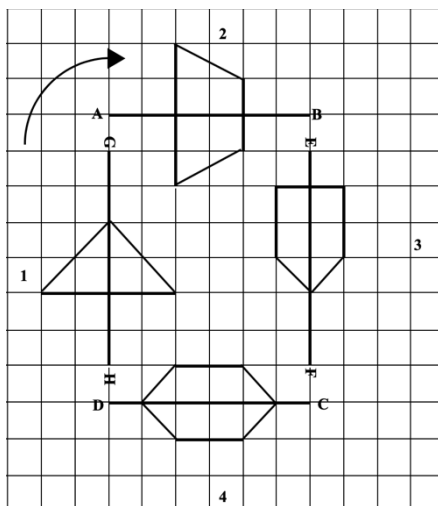   Hrs. O.T. for Sunday = x
            Total O.T. = 3x
        Overtime Earnings = $1,800
    3x = $1,800
      x = $1,800 ÷ 3 = $600
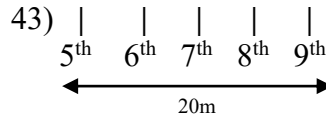   Saturday Over Time = ($600 × 2) ÷ 30
            = $1,200 ÷ 30
            = 40 hours

42)

1 – triangle   3-pentagon
2- trapezium   4- hexagon
The pattern starts with a 3-sided figure,
Then a 4-sided figure, then a 5-sided
Figure and last a 6-sided figure.

43)

    4 spaces = 20m
    ∴ 1 space = 20m ÷ 4 = 5m
    Distance from 3rd umbrella to 20th umbrella
    18 umbrellas = 17 spaces
    Distance = 17 spaces × 5m = 85m

44) 7 angel fish + 3 mollies = $74.50
    Each Molly is $1.50 more than each
    Angel fish
    ∴ 3 mollies = $1.50 × 3 = $4.50
      $74.50 – $4.50 = $70.00
    ∴ 10 fishes = $70.00
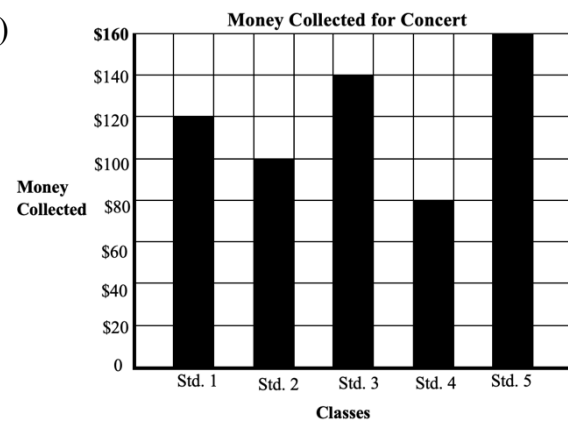   1 fish = $70 ÷ 10 = $7

    Angel Fish = $7.00 each
    Molly Fish = $7.00 + $1.50 = $8.50

    10 Angel Fish = $7 × 10 = $ 70.00
      6 Mollies = $8.50 × 6 = $ 51.00 +
            Total Cost $121.00

45)

    Mean = ($120 + $100 + $140 + $80) ÷ 4
        = $440 ÷ 4 = $110

    New Mean after we collect from Std. 5
    = $110 + $10 = $120
    Total for 5 classes = $120 × 5 = $600
    Bar for Std. 5 money = $600 – $440
            = $160