

**Western Mathematics  
2013 Year 10  
Half Yearly Examination  
Mathematics Course  
Solutions**

**Short Answer Questions**

1.  $8 \times (15 - 3) = 8 \times 12 = 96$

2. What is  $\frac{2}{5}$  of 45kg =  $\frac{2}{5} \times \frac{45}{1} = 18$  kg

3.  $1.2 - 0.35 =$   
$$\begin{array}{r} 1.20 \\ - 0.35 \\ \hline 0.85 \end{array}$$

4. Commission = 6% of \$2 400  
=  $\frac{6}{100} \times \frac{2400}{1}$   
=  $24 \times 6$   
= \$144

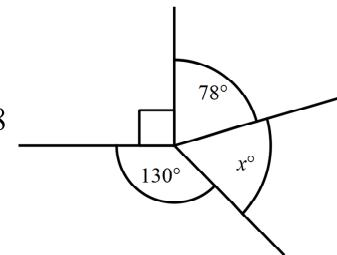
5.  $I = PRN$   
=  $600 \times 0.07 \times 2$   
=  $42.00 \times 2$   
= \$84.00

6. Loss =  $60000 - 45000 = 15\ 000$   
Percentage loss =  $\frac{15000}{60000} = \frac{15}{60} \times 100$   
=  $\frac{1}{4} \times 100$   
= 25%

7. 4.5 kilograms : 750 grams = 4500 g : 750 g  
= 450 : 75  
= 18 : 3  
= 6 : 1

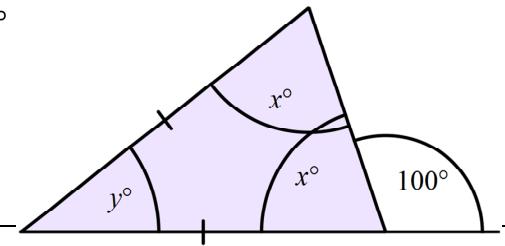
8. What is the value of  $x$  in the diagram?

$$\begin{aligned}x + 130 + 78 + 90 &= 360 \\x + 298 &= 360 \\x &= 360 - 298 \\&= 62\end{aligned}$$



9. The base angles  $x^\circ$  are equal.

$$\begin{aligned}x^\circ &= 180 - 100 = 80^\circ \\y^\circ &= 180 - 2 \times 80 \\&= 180 - 160 \\&= 20^\circ\end{aligned}$$

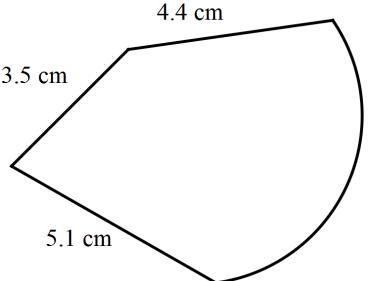


10.	Property	Yes /No
	All sides equal	Y
	All angles equal	N
	Diagonals are equal	N
	Diagonals intersect at right angles	Y
	Axes of symmetry	Y (2)

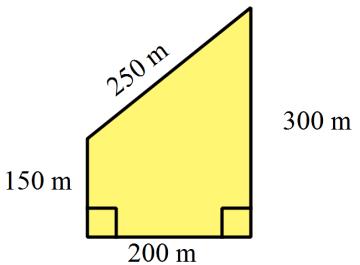
The name is a RHOMBUS

11. Volume =  $10 \times 375\text{ml}$   
 $= 3750\text{ ml}$   
 $= 3.75\text{ litres}$

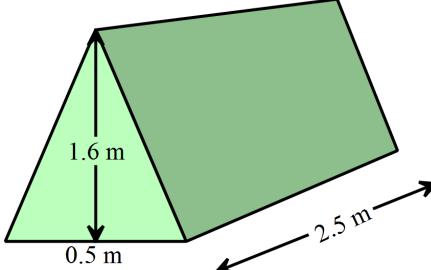
12. Perimeter =  $4.4 + 3.5 + 5.1 + 13.0 + C = 20.4$   
 $C = 20.4 - 13.0$   
 $= 7.4\text{ cm}$



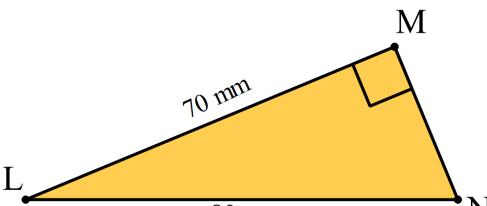
13. 
$$\begin{aligned} A &= \frac{1}{2} h(a + b) \\ &= \frac{1}{2} \times 200 (150 + 300) \\ &= 100 \times 450 \\ &= 45\,000\text{ m}^2 \end{aligned}$$



14. 
$$\begin{aligned} V &= Ah \\ A &= \frac{1}{2} \times 0.5 \times 1.6 \\ &= 0.25 \times 1.6 \\ &= 0.4 \\ V &= 0.4 \times 2.5 \\ &= 1.00\text{ m}^3 \end{aligned}$$



15. 
$$\begin{aligned} MN^2 &= 80^2 - 70^2 \\ &= 6400 - 49 \\ &= 1500 \\ MN &= \sqrt{1500}\text{ mm} \end{aligned}$$



16.  $13m^2 - 5m - 7m^2 - 8m = 6m^2 - 13m$

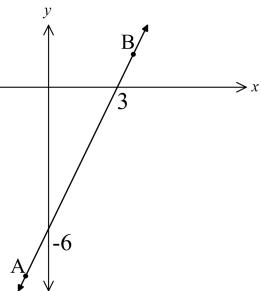
17. When  $x = 2$ ,  $y = 5$  and  $z = -4$   

$$\frac{3y}{2z^2-x} = \frac{2 \times (-4)^2 - 2}{3 \times 5}$$

$$\begin{aligned} &= \frac{2 \times 16 - 2}{15} \\ &= \frac{30}{15} \\ &= 2 \end{aligned}$$

18. 
$$\begin{aligned} 2d(2d+c) - 3c(2d-c) &= 4d^2 + 2dc - 6dc + 3c^2 \\ &= 4d^2 - 4dc + 3c^2 \end{aligned}$$

$$19. \quad m = \frac{\text{rise/run}}{6} = \frac{-6 - 0}{0 - 3} = \frac{6}{3} = 2 \quad \text{OR} \quad m = \frac{-6 - 0}{-3} = \frac{6}{3} = 2$$



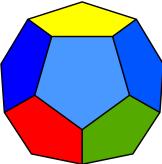
$$20. \quad | \quad 4^{-3} = \frac{1}{4^3} = \frac{1}{64}$$

$$\begin{aligned}
 21. \quad & \text{Solve } 8x + 7 = 22 - 2x \\
 & 10x + 7 = 22 \\
 & 10x = 15 \\
 & x = \frac{15}{10} \\
 & x = 1.5
 \end{aligned}$$

22. Number red =  $12 - 2 - 2 - 5 = 3$   
 Want probability that a red side finishes facing up.  
 $P(\text{red}) = \frac{3}{12}$   
 $= \frac{1}{4}$

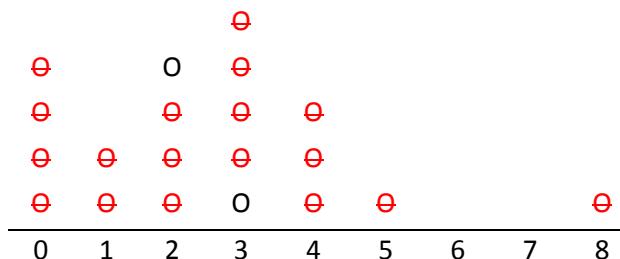


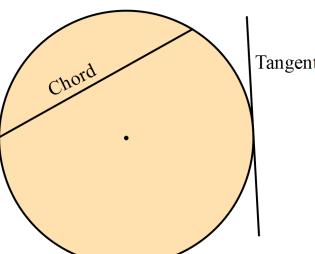
23. Dance and Games are both  $60^\circ$  which is  $\frac{1}{6}$  of his time.

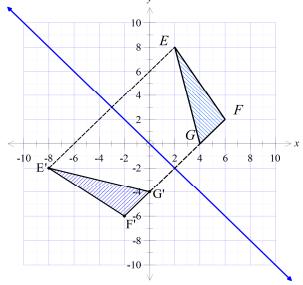


24. James spent 6 hours a week playing sport =  $\frac{1}{4}$  of total.  
 Total =  $6 \times 4 = 24$  hours  
 Reading is  $150^\circ$   
 Reading is  $\frac{150}{360}$  of total *hours* =  $\frac{15}{36} = \frac{5}{12}$   
 Time reading =  $\frac{5}{12} \times 24$   
 = 10 hours

From 20 scores median between 10<sup>th</sup> and 11<sup>th</sup> so between 2 and 3. **Median = 2.5**

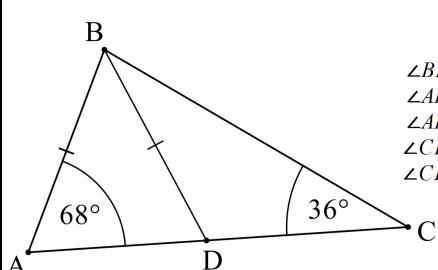


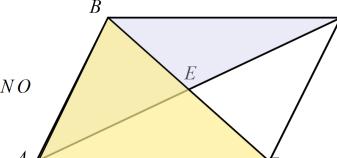
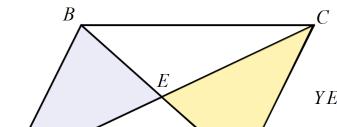
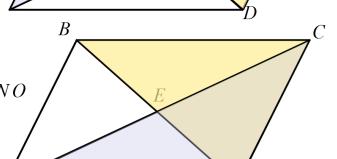
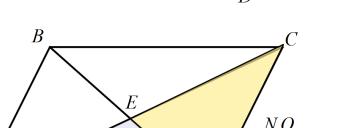
Multiple Choice Questions		
26.	$35\% = \frac{35}{100} = \frac{7}{20}$	D
27.	$\frac{2}{3} \div \frac{3}{4} = \frac{2}{3} \times \frac{4}{3}$	B
28.	Distance travelled in race = $6 \times 75 = 450$ km. Speed = Dist/Time Time = Dist/Speed $= \frac{450}{150}$ hours $= 3$ hours	D
29.	Interest = $900 \times 0.06 \times 3 = \$162$ Amount repaid = $900 + 162 = \$1062$	C
30.	40 hours normal plus 8 hours at time $\frac{1}{2}$ $= 40 + 12 = 52$ hours at normal rates Pay = $\$28 \times 52 = \$1456$	C
31.	$2g + 110 = 180$ ( cointerior angles ) $2g = 70$ $g = \frac{70}{2} = 35$	B
32.		D

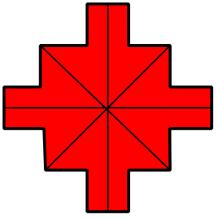
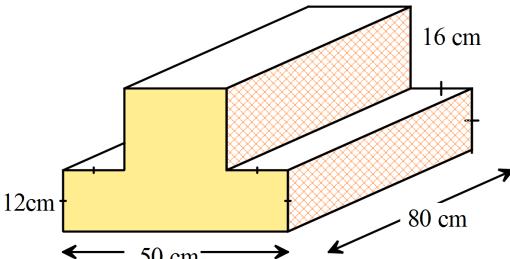
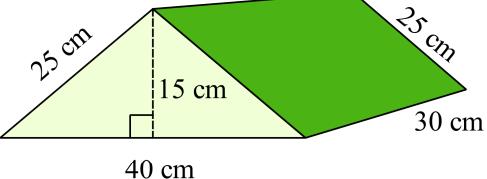
33.		A
34.	$2x + 3x + 90 = 180$ $5x = 90$ $x = \frac{90}{5}$ $= 18$	B
35.	$y = 360 - (72 + 80 + 85)$ $= 360 - 237$ $= 123^\circ$	C
36.	$A = \pi r^2$ $7200 = \pi \times r^2$ $r^2 = \frac{7200}{\pi}$ $r^2 \approx 2292$ $r \approx \sqrt{2292}$ $\approx 47.87\dots$ $d \approx 95.75$ $d = 96 \text{ m ( nearest metre )}$	D
37.	Diagonals of rhombus $x = 35 - 2 \times 7 = 21$ $y = 30 - 2 \times 6 = 18$ Area Rhombus = $\frac{1}{2} \times 21 \times 18 = 189 \text{ m}^2$ Area courtyard = $35 \times 30 - 189$ $= 1050 - 189$ $= 861 \text{ m}^2$	D

38.	$V = \pi r^2 h$ = $\pi \times 8^2 \times 3.2$ = 643.3981 = 643 \text{ m}^3 (\text{nearest m}^3)	A
39.	$B^2 = 1.8^2 + 1.3^2$ = 4.93 $B = \sqrt{4.93}$ = 2.2 m	C
40.	$\sin \theta = \frac{O}{H} = \frac{24}{25}$	C
41.	$C = \frac{5}{9}(F - 32)$ $C = \frac{5}{9}(-22 - 32)$ $C = \frac{5}{9}(-54)$ $C = -30$	B
42.	$3s - 4st - 5s(3 - 2t) = 3s - 4st - 15s + 10st$ = $-12s + 6st$ = $6st - 12s$	A
43.	Midpoint = $\left( \frac{-5+5}{2}, \frac{-5+4}{2} \right)$ = $\left( \frac{0}{2}, \frac{-1}{2} \right)$ = $\left( 0, -\frac{1}{2} \right)$	B
44.	$\frac{u^4 \times u^8}{u^2 \times u^4} = \frac{u^{4+8}}{u^{2+4}}$ = $\frac{u^{12}}{u^6}$ = $u^{12-6}$ = $u^6$	D

45.	$\frac{6-2m}{5} = 4m+3$ $\cancel{5} \times (6-2m) = 5 \times (4m+3)$ $6-2m = 5(4m+3)$	A																		
46.	Choosing 3 males and 4 females from her class of 28 students is a sample of the class.	B																		
47.		D																		
	4 days at \$10 per day = \$40																			
48.	<table border="1"> <thead> <tr> <th>Number of Calls (<math>x</math>)</th> <th>Frequency (<math>f</math>)</th> <th><math>fx</math></th> </tr> </thead> <tbody> <tr> <td>6</td> <td>3</td> <td>18</td> </tr> <tr> <td>7</td> <td>10</td> <td>70</td> </tr> <tr> <td>8</td> <td>11</td> <td>88</td> </tr> <tr> <td>9</td> <td>4</td> <td>36</td> </tr> <tr> <td>10</td> <td>2</td> <td>20</td> </tr> </tbody> </table> $\Sigma f = 30$ $\Sigma fx = 232$ <p>Mean = <math>\frac{232}{30} = 7.733 = 7.7</math> (1 dec place)</p>	Number of Calls ( $x$ )	Frequency ( $f$ )	$fx$	6	3	18	7	10	70	8	11	88	9	4	36	10	2	20	A
Number of Calls ( $x$ )	Frequency ( $f$ )	$fx$																		
6	3	18																		
7	10	70																		
8	11	88																		
9	4	36																		
10	2	20																		
49.	76 and 98 both occur three times so are both modes.	A																		
50.	Range = $100 - 67 = 33$	C																		

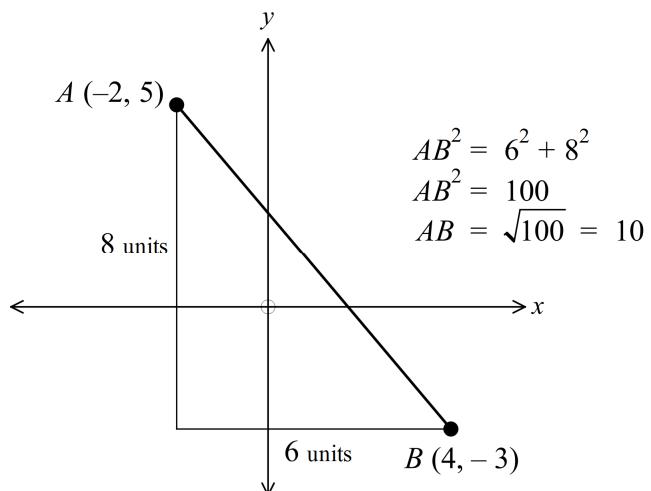
51.	$  \begin{array}{r}  7 & 4 & 5 & - \\  2 & 6 & 8 & \\  \hline  4 & 7 & 7  \end{array}  $ <p><math>\triangle = 7</math> and <math>\square = 6</math></p>	A
52.	$  \begin{aligned}  I &= PRN \\  &= 6500 \times 0.0425 \times 1.5 \\  &= 414.375 \\  &= \$414.38  \end{aligned}  $	A
53.	<p>Price by paying off = <math>342 + 70 \times 24</math>  <math>= 342 + 1680</math>  <math>= 2022</math></p> <p>Extra paid = <math>2022 - 1600</math>  <math>= \\$422</math></p>	B
54.	$  \begin{aligned}  A &= P(1 + R)^N \\  &= 12000(1.07)^4 \\  &= 15729.55212 \\  &= \$15\,729.55  \end{aligned}  $	D
55.	<p>Half is \$1250.</p> <p>Trent receives <math>\frac{2}{5} \times 1250 = \\$500</math></p>	A
56.	 $  \begin{aligned}  \angle BDA &= 68^\circ \\  \angle ABD &= 180^\circ - 2 \times 68^\circ = 44^\circ \\  \angle ABC &= 180^\circ - 68^\circ - 36^\circ = 76^\circ \\  \angle CBD &= \angle ABC - \angle ABD \\  \angle CBD &= 76^\circ - 44^\circ = 32^\circ  \end{aligned}  $	A

57.	   	B
58.	<p>Angle sum = <math>(n - 2) \times 180</math>  <math>= (6 - 2) \times 180</math>  <math>= 4 \times 180</math>  <math>= 720^\circ</math></p> $  \begin{aligned}  4x + 180 &= 720 \\  4x &= 540 \\  x &= \frac{540}{4} = 135^\circ  \end{aligned}  $	C

59.	 <p>4 axes of line symmetry Rotational Symmetry order 4 I is false II is true</p>	D
60.	 <p>Area = <math>50 \times 12 + 26 \times 16 = 1016 \text{ cm}^2</math> Volume = <math>Ah = 1016 \times 80 = 81280 \text{ cm}^3</math></p>	D
61.	 <p><math>A = 25 \times 30 \times 2 + 40 \times 30 + 2 \times \frac{1}{2} \times 40 \times 15</math>  <math>= 1500 + 1200 + 600</math>  <math>= 3300 \text{ cm}^2</math></p>	C

62.	$\text{Area End} = \pi r^2$ $= \pi \times 10^2$ $= 314$ $\text{Area Curve} = 2\pi r h$ $= 2 \times \pi \times 10 \times 40$ $= 2513$ $\text{Surface Area} = 314 + 2513$ $= 2827 \text{ cm}^2$	C
63.	$\cos \beta = \frac{3}{5}$ $\beta = \cos^{-1} \left( \frac{3}{5} \right)$ $\beta = 53.130 = 53^\circ$ ( nearest degree )	C
64.	$\sin 47 = \frac{k}{35.2}$ $k = 35.2 \times \sin 47$ $k = 25.7 \text{ cm}$	A
65.	$\tan A = \frac{190}{110}$ $A = \tan^{-1} \left( \frac{190}{110} \right)$ $A = 60^\circ$	B
66.	$12ax^2 - 16a^2x = 4ax(3x - 4a)$ So the first three are all factors but D is not.	D
67.	Gradient of -4 and passes through the point (1, -5) $y = -4x + b$ $-5 = -4 \times 1 + b$ $-5 = -4 + b$ $b = -1$ $y = -4x - 1$ <i>OR</i> $y - y_1 = m(x - x_1)$ $y - -5 = -4(x - 1)$ $y + 5 = -4x + 4$ $y = -4x - 1$	C

68.



D

69.

$$\begin{aligned} \frac{6a^2z^3}{5bx^2} \times \frac{15b^3x}{12a^4z^3} &= \frac{6a^2z^3}{5bx^2} \times \frac{15b^3x}{12a^4z^3} \\ &= \frac{3a^2b^3xz^3}{2a^4bx^2z^3} \\ &= \frac{3b^2}{2a^2x} \end{aligned}$$

C

70.

$$\begin{aligned} \frac{4x}{3} - 8 &= 2x - 7 \\ 3 \times \frac{4x}{3} - 8 \times 3 &= 3 \times 2x - 3 \times 7 \\ 4x - 24 &= 6x - 21 \\ -2x - 24 &= -21 \\ -2x &= 3 \\ x &= \frac{3}{-2} = -1\frac{1}{2} \end{aligned}$$

A

Ages of Emattogah Cricket Players

1	4	5	6	6	8	9	
2	0	2	4	6	7	9	9
3	1	3	4	5	5	7	
4	2	6					
5	3						

71.

Counting the leaves, there are 23.

B

72.

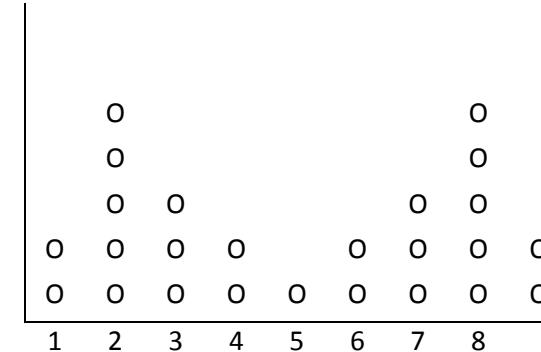
From 23 the middle is the 12<sup>th</sup> leaving 11 above and 11 below. The 12<sup>th</sup> score is 29

C

73.

From the upper 11 scores the middle is the 6<sup>th</sup> of these leaving 5 above and 5 below, 6<sup>th</sup> from top is the 18<sup>th</sup> score which is 35.

B



74.

It is both Bimodal (2 and 8) and symmetrical.

B

75.

From observation mean = 5, median = 5, modes = 2 and 8 and range = 9 - 1 = 8  
Mean and median are equal.

C

Longer Answer Questions		
76. a)	\$1 grows to \$1.5869 \$7500 grows to $1.5869 \times 7500 = \$11\,901.75$	<b>1 mark</b>
b)	If \$8000 grows to \$10100 Then \$1 grows to $10100 \div 8000 = 1.2625$ From table on the 4 year row 1.2625 is under 6% Required interest rate is 6% p.a.	<b>1 mark</b>
c)	$\begin{aligned} A &= P(1 + R)^N \\ &= 7500(1.08)^{10} \\ &= \$16\,191.94 \\ \text{Extra Earned} &= \$16\,191.94 - \$11901.75 \\ &= \$4\,290.19 \end{aligned}$	<b>1 mark</b>
77.	<p> <math>\angle OSR = \angle ORS = 24^\circ</math> (<math>\triangle ORS</math> is isosceles – equal radii)  <math>\angle OSP = 90 - 24 = 66^\circ</math> (Complementary angles)  <math>\angle SPO = \angle OSP = 66^\circ</math> (<math>\triangle OSP</math> is isosceles – equal radii)  <math>\angle SPQ = 62^\circ + 66^\circ = 128^\circ</math> (Adjacent angles)     </p>	<b>3 marks total</b> 3 marks for complete answer with reasons 2 or 1 mark for partial attempts

78. a)	$\begin{aligned} \text{Area of curved surface} &= 2 \pi r h \\ &= 2 \times \pi \times 15 \times 10 \\ &= 942.4 \text{ m}^2 \\ \text{Amount of paint} &= 942.4 \div 25 \\ &= 37.7 \text{ litres} \end{aligned}$	<b>2 marks total</b> 1 for area 1 for amount of paint
b)	$\begin{aligned} V &= \pi r^2 h \\ &= \pi \times 15^2 \times 10 \\ &= 7068.6 \text{ m}^3 \\ C &= 7068.6 \times 1000 \\ &= 7\,069\,000 \text{ litres ( nearest 1000 litres) } \end{aligned}$	<b>1 mark</b>
79. a)	$ON^2 = 50^2 + 80^2 = 8900$ $ON = \sqrt{8900} = 94 \text{ m ( nearest metre )}$	<b>1 mark</b>

b)	$\tan \angle LON = \frac{80}{50}$ $\angle LON = \tan^{-1}\left(\frac{80}{50}\right)$ $= 57.9$ $= 58^\circ$ <p>Bearing = <math>90 + 58 = 148^\circ</math></p>	<b>2 marks total</b> 1 for angle 1 for bearing
c)	$\sin 55^\circ = \frac{PM}{120}$ $PM = 120 \times \sin 55^\circ$ $= 98.29$ $= 98 \text{ m (nearest metre)}$	<b>1 mark</b>
80. a)	4, 6, 8 and 12 are on black segments. $P(\text{Black and even}) = \frac{4}{12} = \frac{1}{3}$	<b>1 mark</b>
b)	1, 2, 3, and 4 are less than 5. 4, 5, 6, 7, 8 and 12 are on black segments. 4 is on both lists so only count it once, so required numbers are 1, 2, 3, 4, 5, 6, 7, 8 and 12. $P(\text{less than 5 or black or both}) = \frac{9}{12} = \frac{3}{4}$	<b>1 mark</b>

b)	Both Rounds have skewed distributions but in reverse to one another. Round 1 is skewed toward the higher scores and round 2 is skewed toward the lower scores. Round 1 would have a higher mean and median than Round 2.	<b>2 marks total</b> 2 marks for a description that correctly mentions different skew and relative value of the means/medians. 1 if one of these is mentioned correctly.
82. a)	$\frac{a}{6} + \frac{4}{3a} = \frac{a}{6} \times \frac{a}{a} + \frac{4}{3a} \times \frac{2}{2}$ $= \frac{a^2}{6a} + \frac{8}{6a}$ $= \frac{a^2 + 8}{6a}$	<b>2 marks total</b> 2 marks for correct answer 1 for some correct working with a minor error

b)	$2x - \frac{5-x}{3} = \frac{3x}{2}$ $6 \times 2x - \frac{6(5-x)}{3} = \frac{6 \times 3x}{2}$ $12x - 2(5-x) = 9x$ $12x - 10 + 2x = 9x$ $5x - 10 = 0$ $5x = 10$ $x = \frac{10}{5}$ $x = 2$	<b>2 marks total</b> 2 marks for correct solution 1 for some correct working with an error
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83.		<b>3 marks total</b> 1 gradient 1 gradient 1 conclusion
	<p>AB and CD appear parallel.</p> $m_{AB} = \frac{6 - -2}{0 - -4}$ $= \frac{8}{4}$ $= 2$ $m_{CD} = \frac{-2 - 4}{4 - 7}$ $= -\frac{6}{-3}$ $= 2$ <p><math>\therefore AB \parallel CD</math></p> <p><math>\therefore</math> ABCD is a trapezium</p>	

# High School

## Half - Yearly Exam

### Mathematics Course

#### Multiple Choice Section Answer Sheet

Name MARKING SHEET

Teacher \_\_\_\_\_

Completely fill the response oval representing the most correct answer.

- |  |  |
|--|--|
| 26. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 51. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 27. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> | 52. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 28. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 53. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 29. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> | 54. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> |
| 30. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> | 55. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 31. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> | 56. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 32. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 57. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 33. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> | 58. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 34. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> | 59. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> |
| 35. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> | 60. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> |
| 36. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 61. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 37. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 62. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 38. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> | 63. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 39. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> | 64. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 40. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> | 65. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 41. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> | 66. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> |
| 42. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> | 67. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 43. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> | 68. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> |
| 44. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 69. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 45. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> | 70. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 46. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> | 71. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 47. A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input checked="" type="radio"/> | 72. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |
| 48. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> | 73. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 49. A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> | 74. A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> |
| 50. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> | 75. A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> |

