

Level 2 Test – Knowledge

Name

60 minutes Non-calculator Scribbling paper allowed

Put marks or ticks in the right column. Multiply total by 1.59 (round up) to get a score /54

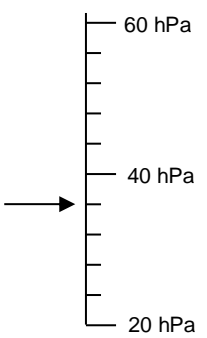
Score: /34 × 1.59 = /54

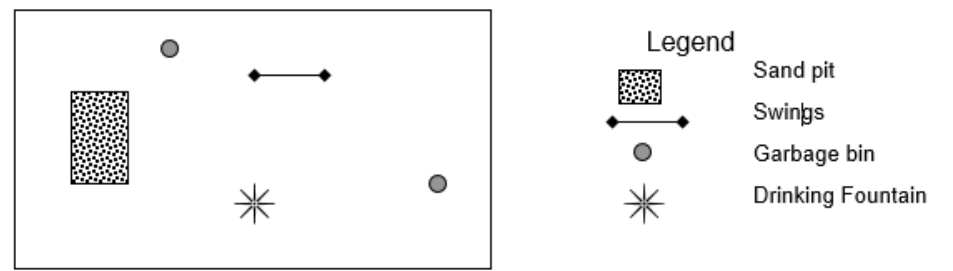
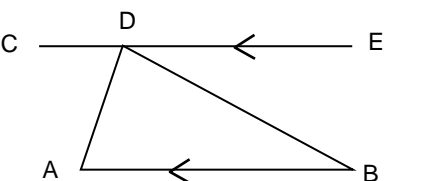
Number		
Q1	What is $\frac{3}{5}$ of \$60?	/1
Q2	Add 20% to \$80.	/1
Q3	If Harriet can type at 36 words per minute, how long would it take her to type 180 words?	/1
Q4	Write the ratio 20:16 in simplest form.	/1
Q5	As a decimal, will $\frac{7}{15}$ terminate, recur or neither?	/1
Q6	What is $4 - -7$?	/1
Q7	$\frac{1}{4} + \frac{1}{3}$	/1
Q8	What is the smallest number that is a multiple of both 10 and 12?	/1

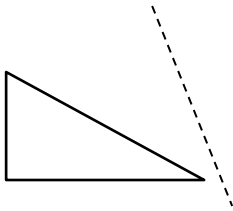
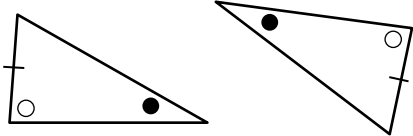
Algebra		
Q9	In a relation, number of children is the independent variable and amount of rice is the dependent variable. Is the relation discrete or continuous?	/1

Q10	Tracey had some guinea pigs. Each one had 4 babies, then a friend gave her 7 more. She ended up with 37. Write and solve an equation to find out how many she started with. Show working.	/2
Q11	Solve $2a + 5 + 7a - 11 = 21$, showing working.	/2
Q12	Solve $3(x - 2) + 4x + 1 = 30$, showing working.	/2

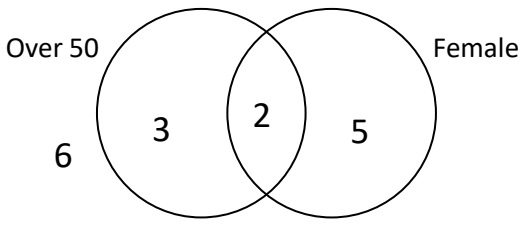
Measurement		
Q13	Write 17:25 in am/pm time.	/1
Q14	How many hours and minutes between 4:30 p.m. and 10:20 a.m. the next day?	/1

Q15	If it is 1 p.m.in Brisbane, what time is it in Perth?	/1
Q16	How far is it around a circular tank 5 m in diameter?	/1
Q17	Find the volume and surface area of a rectangular prism 30 cm by 20 cm by 5 cm. Volume = cm ³ Surface area = cm ²	/2
Q18	 <p>Read this scale.</p>	/1

Geometry		
Q19	 <p>The scale of this plan is 1:200. How far is the drinking fountain from the swings?</p>	/1
Q20	What is the word used to describe two lines at right angles to each other?	/1
Q21	 <p>If $\angle BAD = 75^\circ$ and $\angle BDA = 80^\circ$, what is $\angle BDE$?</p> <p>Give the letters for the two theorems needed to work that out.</p>	/2
Q22	What is the name for a parallelogram with a right angle?	/1

Q23	Reflect this triangle in the dashed line. 	/1
Q24	Do these triangles have to be congruent? 	/2
If so, which theorem is used to show it?		

Statistics		
Q25	You need to do a census of the 847 people between the ages of 13 and 25 in your suburb to find their favourite burger store. What would be a good number of people to ask?	/1

Probability		
Q26	What is probability?	/1
Q27	What is the probability of getting a double 4 if you roll two 4-sided dice?	/1
Q28		/1
If you picked a random person from this group, what is the probability that they would be a male over 50?		