

Level 4 Test – Skills

Name

Number Facts Section 2 minutes Non-calculator

10 points minus 1 point per incorrect or missing answer. Minimum 0.

Score: /10

	Question	Answer	Tick
Q1	$9 + 3$		
Q2	$8 - 5$		
Q3	5×7		
Q4	$12 - 5$		
Q5	$6 + 7$		
Q6	$27 \div 3$		
Q7	6×7		
Q8	$15 - 9$		
Q9	$7 + 7$		
Q10	8×9		
Q11	5×6		
Q12	$36 \div 4$		
Q13	$3 + 7$		
Q14	$40 \div 8$		
Q15	$13 - 9$		

	Question	Answer	Tick
Q16	7×8		
Q17	$11 - 6$		
Q18	$8 + 5$		
Q19	$42 \div 7$		
Q20	$32 \div 4$		
Q21	5×2		
Q22	$7 + 9$		
Q23	$10 - 6$		
Q24	8×9		
Q25	$48 \div 8$		
Q26	9×5		
Q27	$63 \div 7$		
Q28	$4 + 8$		
Q29	$12 - 6$		
Q30	9×6		

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Mental Arithmetic Section 10 minutes Non-calculator

Each question is worth 1 mark. Only answers required. Scribbling paper allowed.

Score: /15

	Question	Answer	Tick
Q1	$128 + 1072$		
Q2	$430 - 786$		
Q3	5100×500		
Q4	$63 \div 20\,000$		
Q5	126.1×8		
Q6	$2\frac{1}{2} \times 133$		
Q7	$15 \div 1\frac{2}{5}$		
Q8	0.36×0.005		
Q9	$0.03 \div -200$		
Q10	$-2 \times 2.8 - 3.61$		
Q11	25×117		
Q12	$2\frac{2}{5} - \frac{3}{4}$		
Q13	$(2.7 \times 10^{21}) \div (2 \times 10^{-13})$		
Q14	$9 \times 24 \div (36 \times 12) + 3 \times 2$		
Q15	$16^{17} \div 4^{31}$		

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Problem Solving Section 45 minutes Calculators allowed

Work on the paper provided. Show your working and explain your thinking. You will get credit for solving the problems and for your communication. Part solutions will get part of the marks.

Problem Solving Score: /25

Communication Score: /10

Q1	Sadie was paid for 36 hours work and given a bonus of \$60. Then 20% of her total earnings was taken in tax, leaving her with \$557.76. How much did she earn per hour?	/5
Q2	The gravitational field (number of gs) on the surface of a planet is proportional to the mass of the planet and inversely proportional to the square of its diameter. If the gravitational field at the surface of the Earth is 1 g, how many gs on the surface of a planet with twice the density of Earth and 3 times the diameter?	/10
Q3	An accountant is standing on the top of a cliff. The horizon is 32 km away. How high above sea level is she? [Assume that the earth is spherical with circumference 40 000 km.]	/10

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Investigating Section

1 week

Calculators allowed

Work on the paper provided. Show your working and explain your thinking. You will get credit for what you find and for your communication.

Investigating Score: /25

Communication Score: /15

Mark four points on the Cartesian plane and connect them to make a quadrilateral.

Mark the mid-point of each side of the quadrilateral and connect them to make another quadrilateral.

Investigate.

Try other polygons.