

October Assessment 2013

NUMBER

Level 4-6

Name: Ansvers Date:

1	A sequence of numbers is shown. 8 14 20 26 <u>.32</u> <u>.38</u> <u>②</u>	L4
2	Write down the next two numbers in the sequence. A different sequence begins 9 15 21 27 33 39 Write down a rule for this sequence. <u>adding 6</u> <u>①</u>	L4
3	From the list of numbers 1 2 5 8 9 24 30 32 a write down the multiples of 8 <u>24, 32</u> <u>②</u> b write down the factors of 45 <u>1, 5, 9</u> <u>③</u> c the square number <u>9</u> <u>①</u> d the cube number <u>8 or 1</u> <u>①</u>	L4
4	Complete the prime factor tree. 	L4

5	Fill in the blanks $37 \times \underline{.100} = 3700$ <u>①</u> $4300 \div \underline{.100} = 43$ <u>①</u>	L4
6	Put these numbers in order of size. Start with the smallest number. 0.302 0.320 0.032 0.203 0.023 <u>0.023, 0.032, 0.203, 0.302, 0.320</u> Some triangles and stars are drawn below. Write down the ratio of triangles to stars. <u>6:4 or 3:2</u> <u>①</u> Write down the ratio of stars to triangles. <u>4:6 or 2:3</u> <u>①</u>	L4
7		L4
8	Work out $6000 - 3875 = \underline{2125}$ <u>①</u>	L4
9	Work out $541.8 - 20.2 = \underline{521.6}$ <u>①</u>	L4
10	Work out $684.75 + 56.4 = \underline{741.15}$ <u>①</u>	L4
11	Work out $42 \times 6 = \underline{252}$ <u>①</u>	L4
12	Work out $92 \div 4 = \underline{23}$ <u>①</u>	L4

13	Work out $5.2 \times 6 = 31.2$ (1)	L4
14	<p>Packets of biscuits cost £1.25 each. Megan buys six packets of biscuits.</p> <p>a How much does Megan pay? $£1.25 \times 6 = £7.50$ (M1, A1)</p> <p>b She pays with a £10 note. How much change should Megan receive? $£10 - £7.50 = £2.50$ (M1, A1)</p>	L4
15	Find the Lowest common multiple of 4 and 14 4, 8, 12, 16, 20, 24, 28, LCM=28 14, 28	L5
16	Find the Highest common factor of 18 and 30 18, 30 1x18, 2x9, 3x6 1x30, 2x15, 3x10, 5x6 HCF=6	L5
17	Look at the number below. 5.327	L5
18	<p>What does the digit 7 represent? 7 thousandths or $\frac{7}{1000}$ (1)</p> <p>Fill in the blanks. $0.3 \times 1000 = 300$ (1) $3 \dots + 100 = 0.03$ (1)</p>	L5

19	<p>Fill in the boxes. The first one is done for you.</p> <p>2.67 rounded to one decimal place is 2.7</p> <p>2.75 rounded to one decimal place is 2.8 (1)</p> <p>2.05 rounded to one decimal place is 2.1 (1)</p> <p>2.91 rounded to one decimal place is 2.9 (1)</p>	L5
20	<p>Write these temperatures in order. Start with the coldest.</p> <p>-4°C 3°C -7°C 0°C -2°C</p> <p>-7°C, -4°C, -2°C, 0°C, 3°C</p> <p>(B2) → all correct (1) → 3 correct</p>	L5
21	Write the ratio 20:12 in its simplest form. 5:3 (1)	L5
22	Work out $3 + (-10) = -7$ (1) $(-9) - (-9) = 0$ (1) $11 + (-8) = 3$ (1) $(-7) - 9 = -16$ (1)	L5
23	Work out $2 \times (-4) = 8$ (1) $(-6) \times (-3) = 18$ (1) $20 + (-5) = -4$ (1) $(-72) + (-8) = 9$ (1)	L5
24	<p>Look at this calculation</p> <p>$32 \times 386 = 12352$</p> <p>Use this information to find answer to</p> <p>$3.2 \times 386 = 1235.2$ (1)</p>	L5
25	<p>Work out $8.2 \times 2.5 = 20.5$</p> <p>$\begin{array}{r} 8.2 \\ \times 2.5 \\ \hline 410 \\ 1640 \\ \hline 2050 \end{array}$</p>	L5
26	<p>Work out $2 + 5 \times 3$</p> <p>$2 + 15 = 17$ (1)</p>	L5

27	<p>Work out $348 \times 27 = 9396$</p> $\begin{array}{r} 348 \\ \times 27 \\ \hline 2436 \\ 7296 \\ \hline 9396 \end{array}$ <p>Work out $657 \div 3 = 219$</p> $\begin{array}{r} 219 \\ 3 \overline{)657} \\ \underline{6} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \end{array}$	L5
28	<p>Work out $2934 \div 5$ (if your answer is a decimal round to 2 d.p.)</p> $\begin{array}{r} 586.8 \\ 5 \overline{)2934.0} \\ \underline{25} \\ 43 \\ \underline{40} \\ 34 \\ \underline{30} \\ 40 \\ \underline{40} \\ 0 \end{array}$	L5
29	<p>Estimate 19×43</p> $\begin{array}{r} 20 \times 40 = 800 \end{array}$	L5
30	<p>A group of 28 people are going on a trip to a zoo. The ratio of males to females is 3:4 How many males are going on the trip?</p> $\frac{M}{F} = \frac{3}{4} = \frac{28}{7} = 4$ $3 \times 4 = 12$ $4 \times 4 = 16$	L5

32	<p>Write 60 as product of its primes.</p> $60 = 2 \times 2 \times 3 \times 5$	L6
	<p>Write 70 as product of its primes.</p> $70 = 2 \times 5 \times 7$	L6
	<p>Find the highest common factor of 60 and 70.</p> $60 = 2 \times 2 \times 3 \times 5$ $70 = 2 \times 5 \times 7$ $HCF = 2 \times 5 = 10$	L6
	<p>Find the Lowest common multiple of 60 and 70.</p> $LCM = 10 \times 2 \times 3 \times 7 = 420$	L6

33	<p>Simplify these expressions.</p> $3^3 \times 3^6 = 3^{3+6} = \underline{3^9} \quad \textcircled{1}$ $6^8 \div 6^3 = 6^{8-3} = \underline{6^5} \quad \textcircled{1}$ $(7^5)^3 = 7^{5 \times 3} = \underline{7^{15}} \quad \textcircled{1}$ $2e^2 \times 9e^3 = 18e^{2+3} = \underline{18e^5} \quad \textcircled{1}$ $10a^7 \div 5a^5 = \frac{10a^7}{5a^5} = \underline{2a^2} \quad \textcircled{1}$	L6
34	<p>Miss Money Penny inherits £880 from a secret agent. She decides to save some of the money and spend the rest. The ratio of savings to spending money is 7 : 4. How much does she save? How much does she spend?</p> <p> $7+4=11$ $880 \div 11 = 80$ $80 \times 7 = 560$ $80 \times 4 = 320$ </p>	L6
35	<p>If 9 ties cost £135, how much do 15 ties cost?</p> <p> $9 \rightarrow 135$ $1 \rightarrow 135 \div 9 = 15$ $15 \rightarrow 15 \times 15 = \underline{225}$ </p>	L6

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End of test

Level Boundaries

- 1-10: 4c
- 11-19: 4b
- 20-29: 4a
- 30-42: 5c
- 43-56: 5b
- 57-70: 5a
- 71-76: 6c
- 77-82: 6b
- 83-90: 6a