Topic Test 1 -- 7M3 Name: _____

Question 1	ANSWERS
(a) How many "thirds" are there in . . . $3\frac{1}{3}$	(a).....
(b) How many "quarters" are there in . . . 3 ½	(b).....
Question 2	
Write as a mixed fraction	
(a) $\frac{7}{4}$	(a).....
(b) $\frac{43}{8}$	(b).....
Question 3	
Simplify:	
(a) $\frac{5}{9} + \frac{5}{9} - \frac{4}{9}$	(a).....
(b) $4 - \frac{7}{10}$	(b).....
Question 4	
Express each fractions in its simplest form:	
(a) $\frac{6}{15}$	(a).....
(b) $\frac{45}{60}$	(b).....
Question 5	
Write each fraction as a decimal:	
(a) $3\frac{12}{1000}$	(a).....
(b) $\frac{13}{50}$	(b).....
Question 6	
Simplify:	
(a) $1{\cdot}26 \times 1000$	(a).....
(b) $1{\cdot}26 \times 5$	(b).....
(c) $1{\cdot}26 \times 1{\cdot}8$	(c) .....

Question 7	
Find the value of:	
(a) $2{\cdot}9 + 1 + 0.22$	(a).....
(b) $3{\cdot}45 - 1{\cdot}8$	(b).....
(c) $4 \overline{)\,7{\cdot}28}$	(c).....
(d) $5 \overline{)\,7{\cdot}28}$	(d).....
Question 8	
Write these percentages as a decimal:	
(a) 3 %	(a).....
(b) 37 ½ %	(b).....
Question 9	
Find the value of:	
(a) $5 + 3 \times 2$	(a).....
(b) $3 + 5 \times 4 - 1$	(b).....
(c) $\frac{12 + 8}{2 + 3}$	(c).....
(d) $3 \times (7 - 1) \div 2$	(d).....
Question 10	
(a) List the first 10 multiples of (i) 10 and (ii) 6	(a) Write answer ⟵ here
(b) From this list write down all the "*common*" multiples of **10** and **6**	(b) Write answer ⟵ here
(c) What is the L.C.M. (*lowest* common multiple) of **10** and **6**	(c).....

Question 11

List ALL of the factors of the numbers:

(a) 20 **1, 2, 4, 5, 10, 20**

(b) 100 **1, 2, 4, 5, 10, 20, 50, 100**

(a) Write answer here ←

(b) Write answer here ←

Question 12

Find the H.C.F. (highest common factor) of:

(a) 12 & 18

(b) 20 & 100

(a).....

(b).....

Question 13

What is the place value of the **7** in each of the numbers below?

(a) 87 100

(b) 8·075

(a)

(b)

Question 14

Write the following numbers using ***powers***:-

(a) 3×10×10×10×10

(b) 2×2×3×3×3×5×2×5×2

(a)

(b)

Question 15

Write the basic numeral for each:

(a) 7×10^2

(b) 2×10^3

(c) 3×5^2

(d) $10^2\times3^3$

(e) $50-\{11+(12-3)\}$

(a).....

(b).....

(c).....

(d).....

(e).....

Question 16

What number is represented by the following:-

(a) $(9\times10\,000)+(2\times1\,000)+100+(8\times10)$

(b) $(8\times100\,000)+(4\times1\,000)+5$

(a).....

(b).....

Question 17

Write each number in "*expanded*" form (as shown in question 16)

(a) 4 075 **$(4\times1\,000)+(7\times10)+5$**

(b) 30 604 **$(3\times10\,000)+(6\times100)+4$**

(a)..... <-----

(b)..... <-----

Question 18

Write the basic numeral for:-

(a) $8-5+4-5$

(b) $9-15+11$

(a).....

(b).....

Question 19

(a) Which numbers listed below are divisible by **3** ?

353 , 521143 , 22224

(b) Which numbers listed below are divisible by **4** ?

2514 , 5588 , 10008

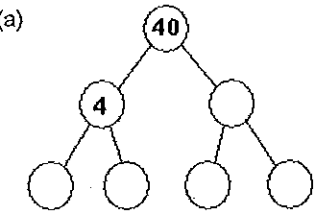
a)

b)

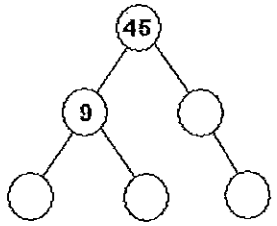
Question 20

Write each of the numbers below as the product of its prime factors by completing the factor trees.

(a)



(b)



Draw your own tree for the next number (200)

(c)

(a)

40 = ..

(b)

45 = ...

(c)

200 =

Topic Test 1 -- 7M3 Name: SOLUTIONS

Question 1	ANSWERS
(a) How many "thirds" are there in ... $3\frac{1}{3}$	(a) 10 ✓
(b) How many "quarters" are there in ... $3\frac{1}{2}$	(b) 14 ✓
Question 2	
Write as a mixed fraction	
(a) $\frac{7}{4}$	(a) $1\frac{3}{4}$ ✓
(b) $\frac{43}{8}$	(b) $5\frac{3}{8}$ ✓
Question 3	
Simplify:	
(a) $\frac{5}{9} + \frac{5}{9} - \frac{4}{9}$	(a) $\frac{2}{3}$ ✓
(b) $4 - \frac{7}{10}$	(b) $3\frac{3}{10}$ ✓
Question 4	
Express each fractions in its simplest form:	
(a) $\frac{6}{15}$	(a) $\frac{2}{5}$ ✓
(b) $\frac{45}{60}$	(b) $\frac{3}{4}$ ✓
Question 5	
Write each fraction as a decimal:	
(a) $3\frac{12}{1000}$	(a) 3.012 ✓
(b) $\frac{13}{50}$	(b) 0.26 ✓
Question 6	
Simplify:	
(a) $1{\cdot}26 \times 1000$	(a) 1260 ✓
(b) $1{\cdot}26 \times 5$	(b) 6.3 ✓
(c) $1{\cdot}26 \times 1{\cdot}8$	(c) 2.268 ✓

Question 7	
Find the value of:	
(a) $2{\cdot}9 + 1 + 0.22$	(a) 4.12 ✓
(b) $3{\cdot}45 - 1{\cdot}8$	(b) 1.65 ✓
(c) $4 \overline{)7{\cdot}28}$	(c) 1.82 ✓
(d) $5 \overline{)7{\cdot}280}$	(d) 1.456 ✓
Question 8	
Write these percentages as a decimal:	
(a) 3 %	(a) 0.03 ✓
(b) 37 ½ %	(b) 0.375 ✓
Question 9	
Find the value of:	
(a) $5 + 3 \times 2$	(a) 11 ✓
(b) $3 + 5 \times 4 - 1$	(b) 22 ✓
(c) $\frac{12 + 8}{2 + 3}$	(c) $\frac{20}{(6)} = \frac{10}{3}$ 4 ✓
(d) $3 \times (7 - 1) \div 2$	(d) 9 ✓
Question 10	
(a) List the first 10 multiples of	
(i) 10 10, 20, 30, 40, 50, 60, 70, 80, 90, 100. ✓	(a) Write answer ← here
and (ii) 6 6, 12, 18, 24, 30, 36, 42, 48, 54, 60. ✓	
(b) From this list write down all the "*common*" multiples of **10** and **6**: 30, 60 ✓	(b) Write answer ← here
(c) What is the L.C.M. (*lowest* common multiple) of **10** and **6**	(c) 30 ✓

Question 11

List ALL of the factors of the numbers:

(a) 20 — 1, 2, 4, 5, 10, 20 ✓

(b) 100 — 1, 2, 4, 5, 10, 20, 25, 50, 100 ✓

(a) Write answer here ←

(b) Write answer here ←

Question 12

Find the H.C.F. (highest common factor) of:

(a) 12 & 18

(b) 20 & 100

(a) 6 ✓

(b) 20 ✓

Question 13

What is the place value of the **7** in each of the numbers below?

(a) 87 100

(b) 8·075

(a) 7 thousands ✓

(b) 7 hundredths ✓

Question 14

Write the following numbers using ***powers***:-

(a) 3×10×10×10×10

(b) 2×2×3×3×3×5×2×5×2

(a) 3×10^4 ✓

(b) $2^4 \times 3^3 \times 5^2$ ✓

Question 15

Write the basic numeral for each:

(a) 7×10^2

(b) 2×10^3

(c) 3×5^2

(d) $10^2 \times 3^3$

(e) $50 - \{11 + (12 - 3)\}$

(a) 700 ✓

(b) 2 000 ✓

(c) 75 ✓

(d) ~~900~~ 2700 ✓

(e) 30 ✓

Question 16

What number is represented by the following:-

(a) $(9 \times 10\,000) + (2 \times 1\,000) + 100 + (8 \times 10)$

(b) $(8 \times 100\,000) + (4 \times 1\,000) + 5$

(a) 92 180 ✓

(b) 804 005 ✓

Question 17

Write each number in "*expanded*" form (as shown in question 16)

(a) 4 075

(b) 30 604

(a) $(4 \times 10^3) + (7 \times 10$ (S ✓

(b) $(3 \times 10^4) + (6 \times 10^2)$ 4×1 ✓

Question 18

Write the basic numeral for:-

(a) 8 – 5 + 4 – 5

(b) 9 – 15 + 11

(a) 2 ✓

(b) 5 ✓

Question 19

(a) Which numbers listed below are divisible by **3** ?

353 , 521143 , 22224

(b) Which numbers listed below are divisible by **4** ?

2514 , 5588 , 10008

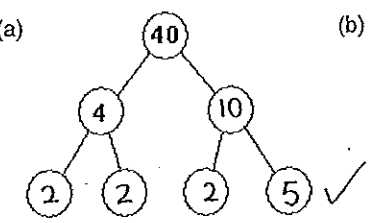
(a) 22224 ✓

(b) 5588, 10008 ✓

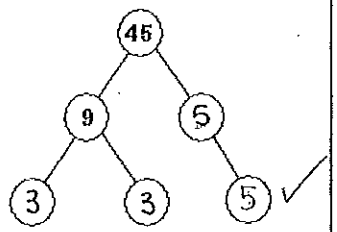
Question 20

Write each of the numbers below as the product of its prime factors by completing the factor trees.

(a)

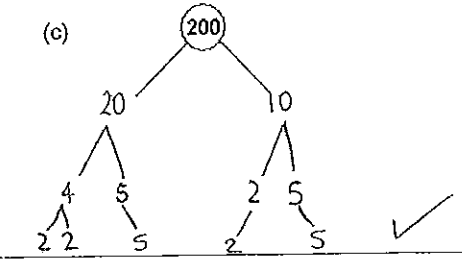


(b)



Draw your own tree for the next number (200)

(c)



(a) 40 = 2 x 2 x 2 x 5 ✓

(b) 45 = 3 x 3 x 5 ✓

(c) 200 = 2 x 2 x 5² x 2 = 2³ x 5² ✓