MATH 0370

01/25/2019

Practice test

1) $127 - 5^2 \times 3$

$= 127 - 25 \times 3$

$= 127 - 75$

$= 52$

2) $7^2 + 13 - 27$

$= 49 + 13 - 27$

$= 62 - 27$

$= 35$

3) $96 \div 3(11+4)$

$= 96 \div 3(15)$

$= 32(15)$

$= 480$

4) $48 \div 6(17-9)$

$= 48 \div 6(8)$

$= 8(8)$

$= 64$

5) $3.\sqrt{64} - 7(12-9)$

$= 3.\sqrt{64} - 7(3)$

$= 3.8 - 7.3$

$= 24 - 21$

$= 3$

6) $98 - 4^2.2 + 5\sqrt{9}$

$= 98 - 16.2 + 5.3$

$= 98 - 32 + 15$

$= 66 + 15$

$= 81$

Natural = {1, 2, 3, 4, 5 ....}

1	1 factor	1
2	2 factors	1, 2
3	2 factors	1, 3
4	3 factors	1, 2, 4
5	2 factors	1, 5
6	4 factors	1, 2, 3, 6
7	2 factors	1, 7
8	4 factors	1, 2, 4, 8

13) 52 ⟶ 1, 2, 4, 13, 26, 52

1	52
2	26
4	13

14) 56 ⟶ 1, 2, 4, 7, 8, 14, 28, 56

1	56
2	28
4	14
7	8

whole $= \{0, 1, 2, 3, \ldots\}$

odd	even
1	2
3	4

prime	composite
2	4
3	6
5	8
7	9
11	10
13	12
	14
	15

28) 17 prime

29) 10 composite

30) 21 composite

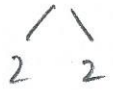
34) 57 composite

33) 93 composite

35) 97 prime

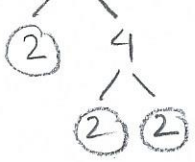
17) 1, (2), (3), 6, (7), 9, 15, (19), 21, (23), 27, (31), 35, 39, (43), 49, (51), 57, (83), 111, 121

$4 = 2^2$



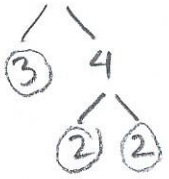
$6 = 2 \cdot 3$

$8 = 2^3$

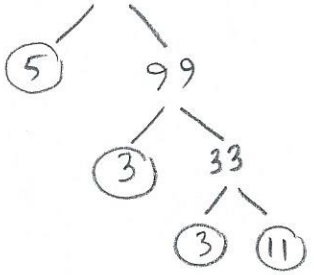


$10 = 2 \cdot 5$

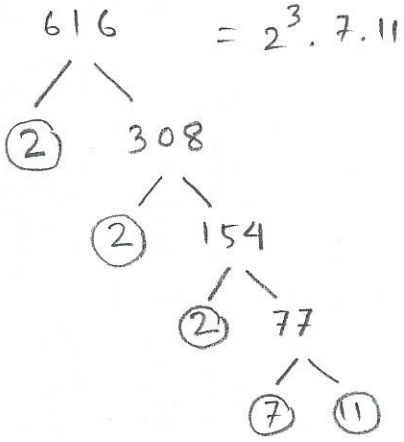
$12 = 2^2 \cdot 3$



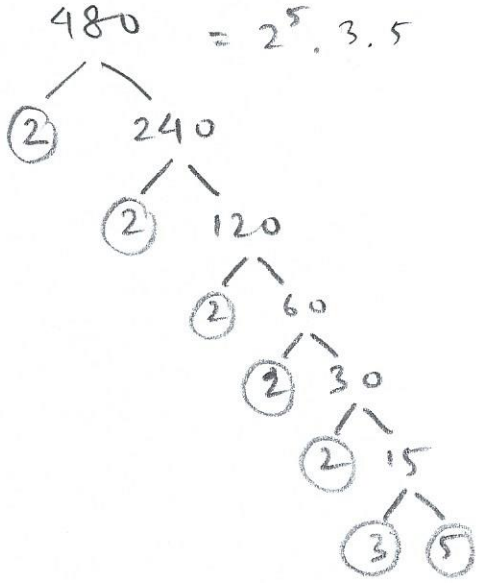
44) $495 = 3^2 \cdot 5 \cdot 11$



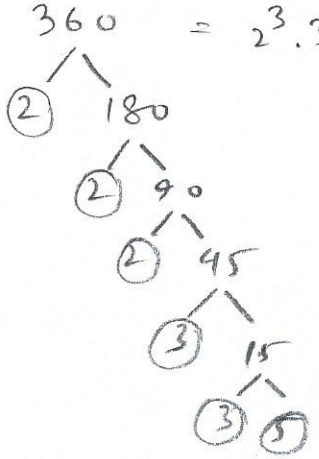
49) $616 = 2^3 \cdot 7 \cdot 11$



11) $480 = 2^5 \cdot 3 \cdot 5$



12) $360 = 2^3 \cdot 3^2 \cdot 5$



Rational $= \{ X \mid X = \frac{p}{q}$ where p & q are whole # and $q \neq 0 \}$

$\rightarrow \frac{3}{5}$

if $p < q$ in value then $\frac{p}{q}$ is a proper

if $p \geq q$, then $\frac{p}{q}$ is an improper fraction , $\frac{8}{8}$, $\frac{7}{3}$