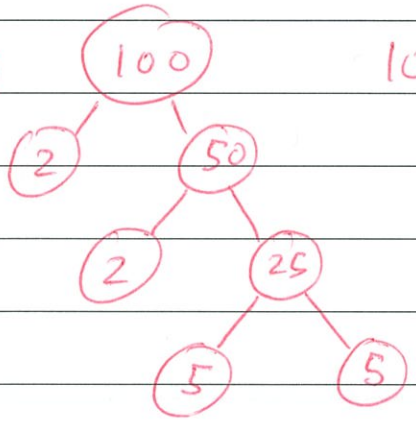
a) A factor of a number divides without remainder into that number.

b) A prime number has only two factors, 1 and itself.

2. a) { 3, 17, 11, 2, 23 }

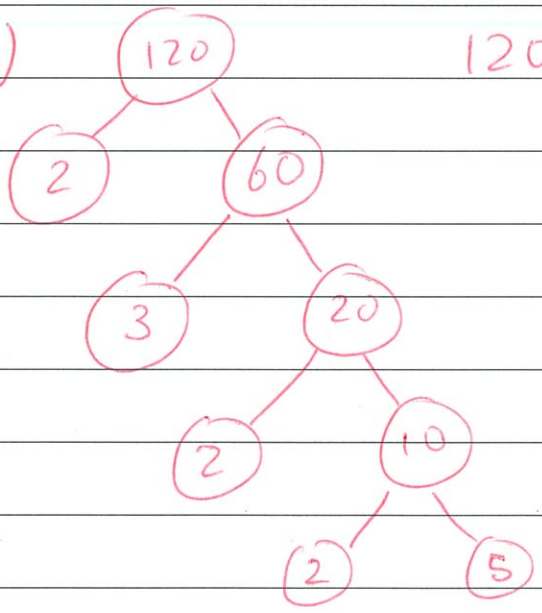
b) { 67, 71, 73 }

3. a)



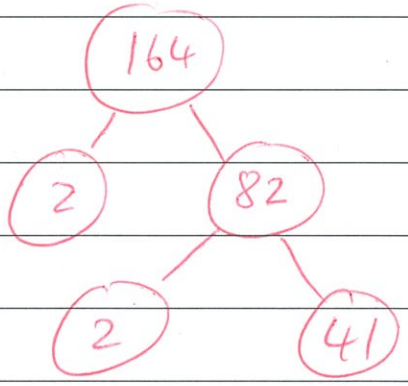
$100 = 2 \times 2 \times 5 \times 5$

b)



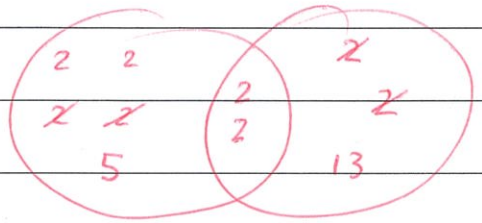
$120 = 2 \times 2 \times 2 \times 3 \times 5$

c)



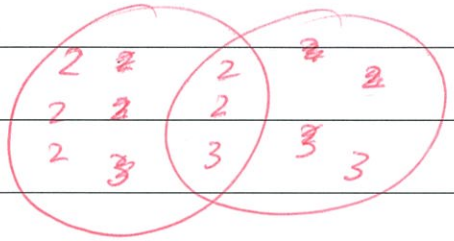
$164 = 2 \times 2 \times 41$

4. a) 80, 52 any working



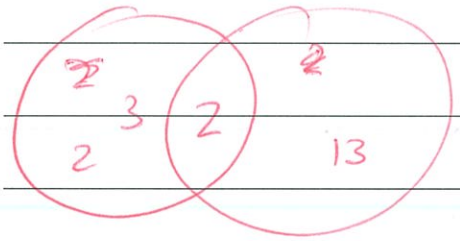
HCF (80, 52) = 4

b) 96, 36



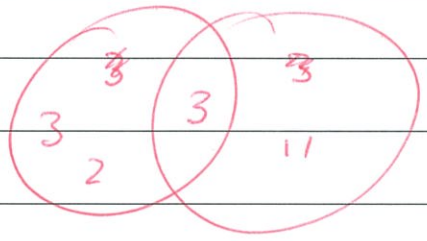
HCF (96, 36) = 12

5. a) 12, 26



LCM (12, 26) = 12 × 13
= ~~156~~ 156

b) 18 33



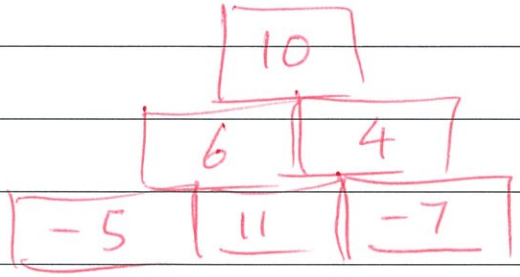
LCM (18, 33) = 3 × 3 × 2 × 11
= 18 × 11
= 198

6.) a) 1, 144
2, 72
3, 48
4, 36
6, 24
8, 18
9, 16
12, 12

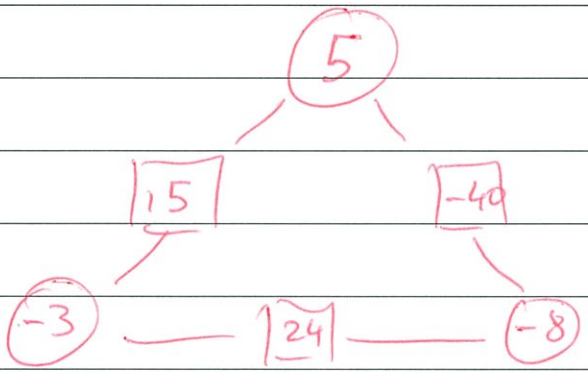
b) 1, 120
2, 60
3, 40
4, 30
5, 24
6, 20
8, 15
10, 12

7. a) -37 c) -17 e) -5
b) 12 d) 51 f) -32

8.



9.



10. a) 8 c) $-2\times(-4)=8$
b) $12\div(6)=2$ d) $(34)\times 3=102$
e) $3\times 6=18$
f) $16\times 0.5+11=19$

11. a) $\frac{46}{100}=\frac{23}{50}$ b) $\frac{968}{1000}=\frac{121}{125}$ (Calc)
c) $\frac{4}{9}$ d) $\frac{8}{9}$

12 a) $\frac{1}{32}$ b) $\frac{1}{9}$ c) $\frac{1}{125}$ d) $\frac{1}{100}$

13. a) $\sqrt{6}$ b) $\sqrt{30}$

14. a) 6 b) 8 c) 9 d) 11