Level 4

1. $2^6 * 2^{-3} =$

   a) 2^{-18}
   b) 2^{-2}
   c) 2^3
   d) 2^9

2. $\dfrac{1+\dfrac{1}{2}}{1-\dfrac{1}{2}} \dfrac{1-\dfrac{1}{2}}{1+\dfrac{1}{2}} = ?$

   a) -1
   b)   0
   c)   1
   d)   8/3

3. 125 % of 160 is? / 125% ya 160 i?

   a)   140
   b)   160
   c)   180
   d)   200

4. Find x if $\dfrac{x}{x-2} = 2$ / Kuma x loko $\dfrac{x}{x-2} = 2$

   a) x = 0
   b) x = 2
   c) x = 4
   d) x = 6

Xitsonga

5. Simplify $\dfrac{x^2}{x-y} - \dfrac{y^2}{x-y} =$ / Olovisa $\dfrac{x^2}{x-y} - \dfrac{y^2}{x-y} =$

   a) $\dfrac{1}{x+y}$

   b) $\dfrac{1}{x-y}$

   c) $x+y$

   d) $x-y$

6. Find the next number in the sequence ! / Kuma nomboro leyi landzelaka eka nxaxamelo!
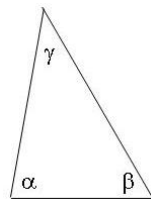
   1 2 3 5 7 11   **?**

   a) 12
   b) 13
   c) 15
   d) 17

7.

If α= 80 and β : γ = 3 : 2 / Loko α= 80 na β : γ = 3 : 2

   a) β =40
   b) β =60
   c) β =80
   d) β =100

8. Convert 2 and ¾ days into hours / Hundzuluxa 2 na ¾ wa masiku kuya eka tiawara

   a) 48
   b) 60
   c) 66
   d) 72

9.

a =1 m

a =1 m
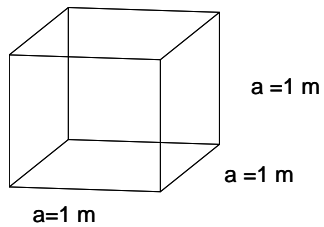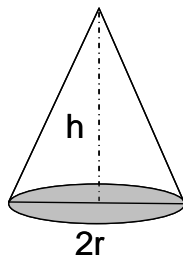
a=1 m

How much liquid can this box hold? / I swihalaki swingani leswi bokisi leri ri nga swi khomaka?

a) 1 l
b) 10 l
c) 100 l
d) 1000 l

10. If volume of the cube is 8 cm³ what is its surface? / Loko vholumu ya khubi ku ri 8 cm³ xana vuhansi bya kona i byi ngani?

a) 4 cm²
b) 6 cm²
c) 12 cm²
d) 24 cm²

11. If h=3cm and 2r=2cm / Loko h=3cm na 2r=2cm

h

2r

What is the volume of this cone? / Xana i yini vholumu ya khoni leyi?
a) π cm³
b) 2 π cm³
c) 3 π cm³
d) 4 π cm³

12. How many axes of symmetry does this shape have? / Xana i ti 'axes' tingani to fana xivumbeko lexi xi nga na tona?
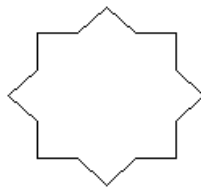

a) 2
b) 4
c) 8
d) 10

13. What is the median of these numbers: / Hi kwihi exikarhi ka tinomboro leti:
2, 6, 10, 22, 30

   a) 10
   b) 12
   c) 14
   d) 16

14. Mark flips a coin 10 times. What is the probability that he obtains heads on his third attempt? / Mark u hundzuluxa mali ya nsimbhi ku ringana ka 10. Xana i kangani a nga kumaka tinhloko loko a ringeta ravuntlhanu?

   a) $\dfrac{3}{80}$

   b) $\dfrac{3}{20}$

   c) $\dfrac{1}{8}$

   d) $\dfrac{1}{2}$

15. The graph below shows the number of male and female participants in an online survey. Which city has the highest percentage of female participants? / Xifaniso laha hansi xi kombisa nhlayo ya vahoxi va xandla va xinuna na xisati eka ndzavisiso wa inthanete. Hi rihi doroba leri nga na tiphesente ta le henhla ta vanghenisi va xandla va xisati?
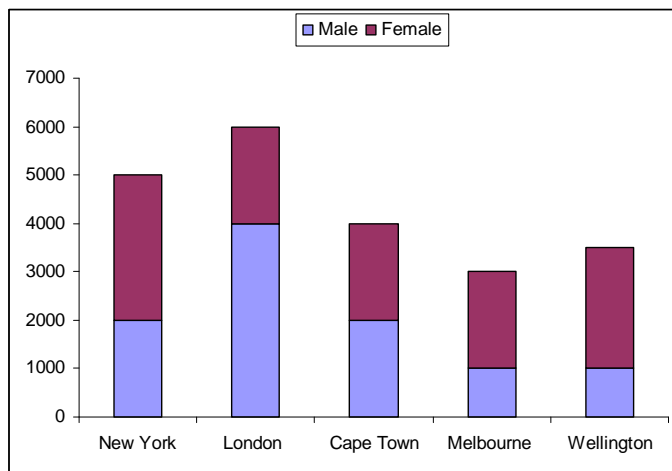
   a) New York
   b) Cape Town
   c) Melbourne
   d) Wellington