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Produced by Yvonne

今有望海島,立兩表,齊高三丈,前後相去千步,令後表與前表參相直。從前表 卻行一百二十三步,人目著地取望島峯,與表末參合。從後表卻行一百二十七步,人目著地取望島峯,亦與表末參合。問島高及去表各幾何? 答曰:島高四里五十五步;去表一百二里一百五十步。 術曰:以表高乘表間為實;相多為法,除之。所得加表高,即得島高。求前表去島遠近者:以前表卻行乘表間為實;相多為法。除之,得島去表數。

今有望松生山上,不知高下。立兩表齊,高二丈,前後相去五十步,令後表與前 表參相直。從前表卻行七步四尺,薄地遙望松末,與表端參合。又望松本,入表 二尺八寸。复從後表卻行八步五尺,薄地遙望松末,亦與表端參合。問松高及山 去表各幾何?答曰:松高一十二丈二尺八寸;山去表一里二十八步、七分步之四。 術曰:以入表乘表間為實。相多為法,除之。加入表,即得松高。求表去山遠近 者:置表間,以前表卻行乘之為實。相多為法,除之,得山去表。

今有南望方邑,不知大小。立兩表東、西去六丈,齊人目,以索連之。令東表與 邑東南隅及東北隅參相直。當東表之北卻行五步,遙望邑西北隅,入索東端二丈 二尺六寸半。又卻北行去表一十三步二尺,遙望邑西北隅,適與西表相參合。問 邑方及邑去表各幾何? 答曰:邑方三里四十三步、四分步之三;邑去表四里四十五步。 術曰:以入索乘後去表,以兩表相去除之,所得為景差;以前去表減之,不盡以 為法。置後去表,以前去表減之,餘以乘入索為實。實如法而一,得邑方。求去 表遠近者:置後去表,以景差減之,餘以乘前去表為實。實如法而一,得邑去表。

今有望深谷,偃矩岸上,令句高六尺。從句端望谷底,入下股九尺一寸。又設重 矩于上,其矩間相去三丈。更從句端望谷底,入上股八尺五寸。問谷深幾何?答曰:四十一丈九尺。 術曰:置矩間,以上股乘之,為實。上、下股相減,餘為法,除之。所得以句高 減之,即得谷深。

今有登山望樓,樓在平地。偃矩山上,令句高六尺。從句端斜望樓足,入下股一 丈二尺。又設重矩于上,令其間相去三丈。更從句端斜望樓足,入上股一丈一尺 四寸。又立小表于入股之會,復從句端斜望樓岑端,入小表八寸。問樓高幾何?答曰:八丈。 術曰:上下股相減,餘為法;置矩閒,以下股乘之,如句高而一。所得,以入小 表乘之,為實。實如法而一,即是樓高。

今有東南望波口,立兩表南、北相去九丈,以索薄地連之。當北表之西卻行去表 六丈,薄地遙望波口南岸,入索北端四丈二寸。以望北岸,入前所望表里一丈二尺。又卻後行1去表一十三丈五尺。薄地遙望波口南岸,與南表參合。問波口廣 幾何? 答曰:一里二百步。 術曰:以後去表乘入索,如表相去而一。所得,以前去表減之,餘以為法;復以 前去表減後去表,餘以乘入所望表里為實,實如法而一,得波口廣。

今有望清淵,淵下有白石。偃矩岸上,令句高三尺。斜望水岸,入下股四尺五寸。望白石,入下股二尺四寸。又設重矩于上,其間相去四尺。更從句端斜望水岸, 入上股四尺。以望白石,入上股二尺二寸。問水深幾何? 答曰:一丈二尺。 術曰:置望水上下股相減,餘以乘望石上股為上率。又以望石上下股相減,餘以 乘望水上股為下率。兩率相減,餘以乘矩間為實;以二差相乘為法。實如法而一 ,得水深。 又術:列望水上下股及望石上下股,相減,餘并為法。以望石下股減望水下股, 餘以乘矩間為實,實如法而一,得水深。

今有登山望津,津在山南。偃矩山上,令句高一丈二尺。從句端斜望津南岸,入 下股二丈三尺一寸。又望津北岸,入 前望股裏一丈八寸。更登高巖北,卻行二十 二步,上登五十一步,偃矩山上。更從句端斜望津南岸,入上股二丈二尺。 問津 廣幾何? 答曰:二里一百二步。 術曰:以句高乘下股,如上股而一。所得以句高減之,餘為法;置北行,以句高乘之,如上股而一。所得以減上登,餘以乘入股裏為實。實如法而一,即得津廣。

今有登山臨邑,邑在山南。偃矩山上,令句高三尺五寸。令句端與邑東南隅及東 北隅參相直。從句端遙望東北隅,入下股一丈二尺。又施橫句于入股之會,從立 句端望西北隅,入橫句五尺。望東南隅,入下股一丈八尺。又設重矩于上,令矩 間相去四丈。更從立句端望東南隅,入上股一丈七尺五寸。問邑廣長各幾何? 答曰:南北長一里一百步;東西廣一里三十三步、少半步。 術曰:以句高乘東南隅入下股,如上股而一,所得減句高,餘為法;以東北隅下 股減東南隅下股,餘以乘矩間為實。實如法而一,即得邑東西廣。

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