

(b) Series = $(2^2 - 2) + (2^3 - 2) + \dots + (2^{n+1} - 2) = 2^2(2^n - 1) - 2n = 2^{n+2} - 2(n+2)$.

$$(c) A = 1 + 1r^n + 1r^{2n} + \dots = \frac{1}{1-r^n},$$

$$B = 1 + 1r^q + 1r^{2q} + \dots = \frac{1}{1-r^q},$$

$$\therefore A^q (B-1)^n = \frac{1}{(1-r^n)^q} \cdot \left(\frac{r^q}{1-r^q} \right)^n$$

$$= \frac{r^{nq}}{(1-r^n)^q (1-r^q)^n},$$

$$B^n (A-1)^q = \frac{1}{(1-r^q)^n} \cdot \left(\frac{r^n}{1-r^n} \right)^q$$

$$= \frac{r^{nq}}{(1-r^n)^q (1-r^q)^n},$$

$$\therefore A^q (B-1)^n = B^n (A-1)^q.$$

CLASSICS.

QUESTIONS ON CÆSAR—BOOK II.

BY H. J. STRANG.

Translate chapter 13.

1. Parse *filiis, millia, egressi, more, petierunt*.

2. *Traditis*.—What compounds of *do* are of the 3rd conjugation?

3. *Significare*.—What compounds of *facio*, make *facio, ficio* and *fio* respectively?

4. *Ex oppido*.—When would you render *from* by *a (ab), e (ex)* and *de* respectively?

5. *Oppidum Bratuspantium*.—What difference between the Latin and the English idiom?

6. *Contulissent abesset*.—Account for the mood and the change of tense.

7. *Filiis, armis, ceperunt, manus, more*.—Mention any peculiarity or irregularity of each respectively.

8. *Egressi*.—Inflect the present indicative.

9. *Contulissent*.—Give all the infinitive forms, active and passive.

10. Name and distinguish the different words for *army*.

Translate chapter 26.

1. Classify the various uses of the subjunctive in this chapter.

2. *Item urgeri*.—What is the force of *item* here?

3. *Circumvenirentur*.—What prepositions have usually the effect of making the intransitive verbs with which they are compounded transitive? Exemplify a similar effect in English compounds.

4. *Paulatim*.—Give any other adverbs ending in *tim*. How are adverbs usually formed? Give example.

5. *Prælio nunciato*.—Would *Cæsare nunciato* be correct Latin? Why?

6. *Loco superiore*.—Decline the plural. Translate *superiore æstate*.

7. *Castris potitus*.—What other case is *potior* found with, and when?

8. Form adjectives from *legio, hostis, eques, periculum, miles*.

9. *Constiterat*.—Conjugate. Distinguish from *constituo*.

10. Translate into Latin: This will be a great help to us. We shall pitch our camp at the foot of the mountain. You have lost no time.

Translate into idiomatic English:

1. *Hostes neque a fronte ex inferiore loco subeuntes intermittere, et ab utroque latere instare, et rem esse in angusto vidit, neque ullum esse subsidium quod submitti posset.*

2. *Cæsari omnia uno tempore erant agenda; vexillum proponendum, quod erat insigne, cum ad arma concurrere oporteret.*

3. *Ratio ordo que agminis aliter se habebat ac Belgæ ad Nervios detulerant.*

4. *Nullum aditum esse ad eos mercatoribus; nihil pati vini, reliquarum que rerum ad luxuriam pertinentium, inferri.*

GRAMMAR AND COMPOSITION.

1. Conjugate compounds of *re* and *ago*, *cum* and *facio*, *ex* and *fero*, *ad* and *tango*, *ob* and *cædo*, *inter* and *lego*.

2. Compare the adverbs corresponding to *acer, audax, magnus, liber, facilis, parvus, diligens*.

3. Distinguish *post, postea, postquam*, and exemplify the correct use of each.

4. Distinguish *tui (vestri) milites, ii (eorum) (sui) agri*.