ANSWER KEY FOR

ARYABHATTA INTER-SCHOOL MATHS COMPETITION – 2003

Class - VIII

PART - I

1. (i) T
   (ii) T
   (iii) T
   (iv) F
   (v) T
   (vi) F
   (vii) F
   (viii) F
   (ix) F
   (x) T

2. (i) 2500
   (ii) 43/30**
   (iii) 250
   (iv) ₹50
   (v) 45°
   (vi) 42°
   (vii) 10 cm
   (viii) 1.225 m
   (ix) 100π cm^2
   (x) ordered array

3. (i) (c)
   (ii) (d)
   (iii) Answer is 15. All choices are incorrect

(iv) (d)
(v) (d)
(vi) (d)
(vii) (d)
(viii) (b)
(ix) (b)
(x) (c)

PART - II

4. (i) 10
   (ii) $\frac{6}{8}, \frac{7}{9}, \frac{5}{6}, \frac{11}{13}$
   (iii) 16
   (iv) Vidur - ₹2400, Ishan - ₹1800
5. (i) A - ₹3762, B - ₹2280, C - ₹6498
   (ii) 37
   (iii) ₹3750
   (iv) 1.5 years
6. (i) ₹6400
   (ii) ₹125
   (iii) 64/3 days
7. (i) 4 km
   (ii) 14 m, 10 m
   (iii) $(12\pi - 9\sqrt{3})$ cm^2
8. (i) 243 m
   (ii) (a) 3abc(a-b)(b-c)(c-a)
   (b) $(x-y)(x+y)(x^2+xy+y^2)(x^2-xy+y^2)$
   (iii) 15 cm, 8 cm, 17 cm
9. (i) 1644 cm^2
   (ii) (a) 55
   (b) 46
   (c) 60

** Question statement should be - $1+\frac{1}{2+\frac{1}{3+\frac{1}{4}}}$