

**ANSWER KEY FOR**  
**ARYABHATTA INTER-SCHOOL MATHS COMPETITION – 2007**

**Class - VIII**

**PART - A**

1. (i)  $20x + y$   
(ii) 0.85  
(iii)  $2p - 22$   
(iv) 8  
(v) 15  
(vi) 19%  
(vii)  $(x+1)(x-3)$   
(viii) 0.5025 sec  
(ix) 5.6  
(x) 65, 126
2. (i) T  
(ii) F  
(iii) F  
(iv) T  
(v) F  
(vi) F  
(vii) T  
(viii) F  
(ix) T  
(x) T
3. (i) (b)  
(ii) (c)  
(iii) (b)

NOTE: This answer key is created by [KoolSmartLearning.com](http://KoolSmartLearning.com) for reference purpose.

- (iv) (c)
- (v) (b)
- (vi) (a)
- (vii) (b)\*\*
- (viii) (c)
- (ix) (c)
- (x) (c)

## PART - B

- 4. (i) 12 hours  
(ii) 809:676  
(iii) 43.75%
- 5. (i)  
(i)  $249.48\text{m}^2$   
(ii)  $523.908\text{ m}^3$   
(ii)  $x = 9$  units  
(iii)  $45^\circ, 60^\circ, 75^\circ$
- 6. (i)  
(a) 4% loss  
(b) ₹ 34.56  
(ii) Father – 38 years, Son – 12 years  
(iii) 20 men  
(iv) ₹ 169.18
- 7. (i)  $9\frac{1}{3}\%$  profit  
(ii) ₹12500  
(iii) ₹18000
- 8. (i)  $88\text{ cm}^2$   
(ii)  $(8+2\sqrt{7})\text{ cm}$   
(iii)  $3\sqrt{5}\text{ cm}$
- 9. (ii) ₹ 42  
(iii)  $x^{2a} - x^a y^b + y^{2b}$   
(iv) ₹ 794.31 \*\*\*

**\*\* The value of  $x$  is misprinted. It should be  $x = \frac{2t}{1+t^2}$**

**\*\*\* In the ques, the amount D paid should be ₹1265 instead of ₹1256 and the answer would be ₹800.**

KSL