

Radley College: 13+ Maths Specimen Paper



School: Radley College

Subject: Maths

Level: 13+

Time: 60 mins

Type: Test Paper

Year in use: Since 2013 (Currently available for download from the school website)13+

Q. ▾

Answer ▾

Solution ▾

1.

(a) 545

(b) 672

2.

(a) $p + 6q$

(b) $20ab - 25b^2$

- 3.
- (a) $^2/5$
 - (b) $^{11}/_{15}$
 - (c) $^2/_{21}$
 - (d) $^{74}/_{105}$

- 4.
- (a) £806
 - (b) £1362

- 5.
- (a) $^{20}/_3$
 - (b) 3_3
 - (c) $^1/2$

- 6.
- mean = 3.15
median = 2
mode = 3

- 7.
- (a) $x = 7 ; y = 19$
 - (b) $(7 , 19)$
 - (c) The two equations does not intersect because there is no x and y values that will satisfy both equations.

8. 5.51

9. 57.98° (2 decimals) or 58.0° (1 decimal)

10. $h = \frac{(c - b)}{a}$

11. 36°

12. 18

13. 74.95 cm^2

14. (a) $35x + 4y = 204.48$
(b) $35x + 10y = 242.40$
(c) $x = \text{£}5.12/\text{hr}$; $y = \text{£}6.32/\text{hrs}$

Radley College: 13+ Maths Scholarship Paper I 2014



School: Radley College

Subject: Maths

Level: 13+

Time: 60 mins

Type: Scholarship Paper 1

Year in use: 2014

Q

Answer

Solution

1.

- (a) (i) 448.088
- (ii) 8.02
- (b) (i) $1/2$
- (ii) $8/5$
- (iii) $27/7$

2.

- (a) 346,000
- (b) 7,100
- (c) 3,800
- (d) 200

2. (a) 346,000
(b) 7,100
(c) 3,800
(d) 200

3. (a) (i) $x^2 + 6xy + 9y^2$
(ii) $54a^3 + 2b^2$
(b) (i) $7x^2y(4x + 3y^2)$
(ii) $3(a + 4b)(a - 4b)$
(iii) $(x - 3)(x - 6)$
(c) (i) $\frac{a - b}{2c}$
(ii) x^2/y

4. (a) $x = 7$
(b) $x = 6$
(c) $x = 5$
(d) $x = (ad - bc)/(a - c)$

5. (a) $x = 5$, $y = -1$
(b) $x = 30$, $y = 18$

6. (a) $x = 2$ or -7
(b) $x = 5/2$ or $3/2$
(c) $x = 7$ or $17/5$