

Delta 1

Unit 7 Review (Calculator)

Equations

How well did you do:

Equations	Score = $\frac{\quad}{38}$	
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<i>Topics/skills which need to be revisited:</i>	<i>Questions from the review</i>	<i>Further Practice from Delta 1</i>
- Solve two-step equations with unknown on one side - Substitute integers into a formula then solve the resulting equation - Form equations from diagrams and/or words and solve the resulting equation	1, 4 2 7, 8, 9	- P172 Q6b,7 - P171 Q5 - P173 Q2-4, P179 Q3
Solve equations with unknown on both sides	3, 5	P172 Q9b, 10
- Solve equations involving x^2 or x^3 - Use trial and improvement to find solutions to 1 d.p.	6 10	- P173 Q13, 14 - P180 Q10

1. Solve

a) $2x + 5 = 19$

.....

(2 marks)

b) $13 - 4y = 7$

.....

(2 marks)

2.

$2y = ax + b$

a) Find y when $x = 5$, $a = 3$, $b = -6$

.....

(2 marks)

b) Find x when $a = 2$, $y = 8$, $b = 5$

.....

(2 marks)

3. Solve

a) $6x + 8 = 2x + 11$

.....

(2 marks)

b) $12 - 4y = 2(y + 9)$

.....

(3 marks)

4. Solve $\frac{x}{2} + 5 = 11$

.....

(3 marks)

5. Solve $4(t - 3) = 2t + 7$

.....

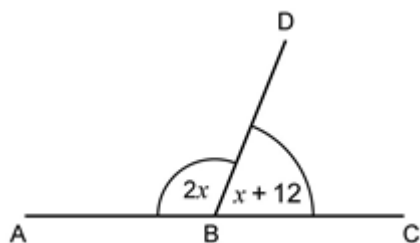
(3 marks)

6. Find the solutions of $p^2 = 81$

.....

(2 marks)

7.



ABC is a straight line.

a) Form an equation in x .

.....

b) Solve the equation.

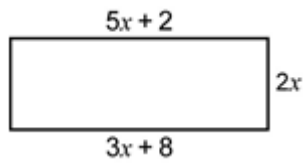
$x =$

c) Find the size of angle ABD.

.....^o

(4 marks)

8. Here is a rectangle.



All the measurements are in cm.

a) Form an equation in x and solve.

.....

b) Find the perimeter of the rectangle. Give your answer as a number, not an expression.

.....cm

(5 marks)

9.

Ben is y years old.

Liz is two years older than Ben.

James is twice Liz's age.

The sum of their ages is 58 years.

a) Form an equation in y .

.....

b) Solve the equation.

.....

c) Find James' age.

.....

(5 marks)

10.

Use a trial and improvement method to find the solution of $x^3 + 2x = 99$
that lies between $x = 4$ and $x = 5$

Give your solution correct to 1 decimal place.

.....

(3 marks)

[END of REVIEW]