Name:

Exam Style Questions

Changing the Subject

Corbettmaths

Equipment needed: Pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 7

Answers and Video Solutions

1. Make d the subject of

$$e = d + 5$$

d = ...

(1)

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2. Rearrange $t = \frac{w}{2}$ to make w the subject.

w = ...

(1)

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3. Rearrange this formula to make c the subject

$$a = c - w$$

Circle your answer.

$c = a - w$ $\quad$ $c = w - a$ $\quad$ $c = aw$ $\quad$ $c = a + w$

(1)

4. Make x the subject of

$$y = 3x$$

Circle your answer.

$x = y + 3$ $\quad x = \frac{y}{3}$ $\quad x = \frac{3}{y}$ $\quad x = y - 3$

(1)

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5. Make *w* the subject of the formula

$$y = 3w - a$$

w = ...

(2)

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6. Make *w* the subject of the formula

$$s = \frac{w}{a}$$

w = ...

(1)

7. $v = u + 10t$

(a) Work out the value of v when u = 4 and t = 3

v = ...

(2)

(b) Make *u* the subject of the formula

$$v = u + 10t$$

u = ...

(2)

(c) Make *t* the subject of the formula

$$v = u + 10t$$

t = ...

(2)

8. Given that $x + y = 1$

What does y equal?

y = ...

(1)

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9. Rearrange $y = \frac{k}{x}$ to make x the subject

x = ...

(2)

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10. Isaac is rearranging $m = 3t - 8$ to make t the subject.

$$m = 3t - 8$$
$$-8 \qquad -8$$
$$m - 8 = 3t$$
$$\div 3 \qquad \div 3$$
$$\frac{m - 8}{3} = t$$

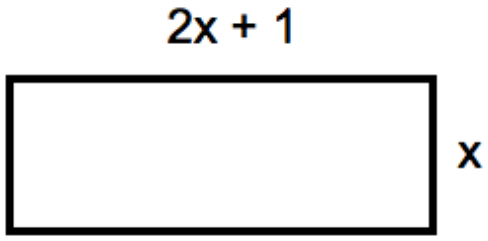
Explain what mistake Isaac has made.

.....

.....

(1)

11. Here is a rectangle.



P is the perimeter of the rectangle.

(a) Show that $P = 6x + 2$

(2)

(b) Express x in terms of P

x = ...

(2)

12. Make m the subject of the formula

$$s = \frac{hm}{4}$$

m = ...

(2)

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13. Express v in terms of t

$$t = \frac{v}{4} + 1$$

v = ...

(2)

14. Make *d* the subject of the formula $c = 4d + 5$

d = ...

(2)

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15. Make *g* the subject of the formula:

$a = \sqrt{g}$

g = ...

(2)

16. Make *y* the subject of the formula:

$$k = y^3 + a$$

y = ...

(2)

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17. $C = 4x + 5y$

(a) Find the value of C when x = 9 and y = –2

C = ...

(2)

(b) Make *x* the subject of the formula

x = ...

(2)

(c) Find the value of x when C = 51 and y = 3

x = ...

(2)

18. Given that $3y = 2x$

(a) Write y in terms of x

y = ...

(2)

(b) Write x in terms of y

x = ...

(2)

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19. Rearrange $2x - y + 1 = 0$ to make x the subject

x = ...

(2)

20. Rearrange $8 + c = 3 - a$ to make a the subject.

a = ...

(2)

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21. Make w the subject of $a = \frac{w - 2}{6}$

w = ...

(2)

22. Rearrange the formula $r = \sqrt{3w + t}$ to make t the subject

t = ...

(2)

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23. Rosie writes down Pythagoras' Theorem, $a^2 + b^2 = c^2$

Make a the subject

a = ...

(2)

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24. Make p the subject of $ac = \frac{\pi}{p}$

p = ...

(2)

25. Rearrange $v^2 = u^2 + 2as$ to make s the subject.

s = ...

(2)

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26. Rearrange $w = \sqrt[3]{5y - 8}$ to make y the subject.

y = ...

(3)