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

© Corbettmaths 2022

1. Make d the subject of



$$e = d + 5$$

d = ...

(1)

---

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



w = ...

(1)

---

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)

© Corbettmaths 2022

4. Make x the subject of



$$y = 3x$$

Circle your answer.

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

(1)

---

5. Make *w* the subject of the formula



$$y = 3w - a$$

w = ...

(2)

---

6. Make *w* the subject of the formula



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

w = ...

(1)

© Corbettmaths 2022

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)

© Corbettmaths 2022

8. Given that $x + y = 1$

What does y equal?

y = ...

(1)

---

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

x = ...

(2)

---

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.

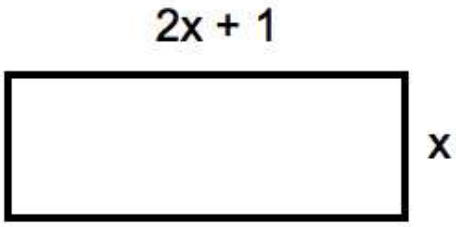
.....

.....

(1)

© Corbettmaths 2022

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)

© Corbettmaths 2022

12. Make m the subject of the formula



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

m = ...

(2)

---

13. Express v in terms of t



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

v = ...

(2)

© Corbettmaths 2022

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



d = ...

(2)

---

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



$$a = \sqrt{g}$$

g = ...

(2)

© Corbettmaths 2022

16. Make y the subject of the formula:



$$k = y^3 + a$$

y = ...

(2)

---

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)

© Corbettmaths 2022

18. Given that $3y = 2x$



(a) Write y in terms of x

y = ...

(2)

(b) Write x in terms of y

x = ...

(2)

---

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



x = ...

(2)

© Corbettmaths 2022

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



a = ...

(2)

---

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



w = ...

(2)

© Corbettmaths 2022

[redacted]

t = ...

(2)

---

23. [redacted]

a = ...

(2)

---

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

p = ...

(2)

© Corbettmaths 2022

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



s = ...

(2)

[redacted]



y = ...

(3)

© Corbettmaths 2022