1. Given $z = 2x + 5y$, find the value of z when $x = 3$ and $y = 2$.
Diberi $z = 2x + 5y$, cari nilai z apabila $x = 3$ dan $y = 2$.

- A 10
- B 16
- C 24
- D 30

2. Given $y = x - 5$. Express x as the subject of the formula.
Diberi $y = x - 5$. Ungkapkan x sebagai perkara rumus.

- A $y + x = 5$
- B $y = x + 5$
- C $x = y - 5$
- D $x = y + 5$

3. Given $m(3 + p) = p + q$, calculate the value of q if $m = -9$ and $p = -6$.
Diberi $m(3 + p) = p + q$, hitung nilai q jika $m = -9$ dan $p = -6$.

- A −33
- B −27
- C 21
- D 33

4. Given $\sqrt[3]{\frac{x}{r-t}} = 2$, express r in terms of t and x.

Diberi $\sqrt[3]{\frac{x}{r-t}} = 2$, ungkapkan r dalam sebutan t dan x.

- A $r = x + \frac{8}{t}$
- B $r = \frac{x + 8t}{8}$
- C $r = 8x + t$
- D $r = x + \frac{t}{8}$

5. If $m = 2\sqrt{n}$, then $n =$
Jika $m = 2\sqrt{n}$, maka $n =$

- A $\frac{m}{4}$
- B $\frac{2m}{4}$
- C $\frac{m^2}{4}$
- D $\frac{m^2}{2}$

LIVEWORKSHEETS

6. Given $4h = 3k + 5$, find the value of h when $k = 1$.
Diberi bahawa $4h = 3k + 5$, cari nilai h apabila $k = 1$.

- A 2
- B 4
- C 3
- D 5

7. Given $\frac{p-q}{2r} = 2$, then $q =$

Diberi $\frac{p-q}{2r} = 2$, maka $q =$

- A $p - r$
- B $p + r$
- C $p - 4r$
- D $4r - p$

8. Given $R = a + bv^2$, find the value of R if $a = 5$, $b = 2$ and $v = -3$.
Diberi $R = a + bv^2$, cari nilai R jika $a = 5$, $b = 2$ dan $v = -3$.

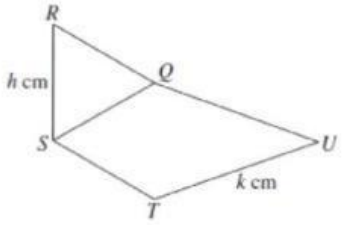
- A −13
- B −7
- C 17
- D 23

9. Given that $\frac{pk-5}{2p-3k} = 2$, find the value of k when $p = 1$.

Diberi bahawa $\frac{pk-5}{2p-3k} = 2$, cari nilai k apabila $p = 1$.

- A $\frac{4}{7}$
- B $1\frac{2}{7}$
- C 2
- D 4

10. The diagram consists of an equilateral triangle and a kite.
Rajah di bawah terdiri daripada sebuah segi tiga sama sisi dan sebuah lelayang.



Given P is the perimeter of the diagram. Which of the following is the correct algebraic formulae?
Diberi P ialah perimeter rajah itu. Antara rumus algebra berikut, yang manakah betul?

- A $P = 3h + 2k$
- B $P = 2h + 2k$
- C $P = 4h + k$
- D $P = 2h + k$

LIVEWORKSHEETS

11. Given that $\sqrt{\frac{x}{y-1}} = 4$, then $y =$

Diberi bahawa $\sqrt{\frac{x}{y-1}} = 4$, *maka* $y =$

- A x
- B $\frac{x+8}{8}$
- C $\frac{x+1}{16}$
- D $\frac{x+16}{16}$

12. The table shows the results of an experiment involving two quantities, x and y.
Jadual di bawah menunjukkan keputusan suatu eksperimen yang melibatkan dua kuantiti, x dan y.

x	0	1	2	3
y	1	2	3	4

Find the formula that relates x and y.
Cari rumus yang menghubungkan x dan y.

- A $y = 2x$
- B $y = 2x + 1$
- C $y = 2x - 1$
- D $y = x + 1$

13. The lengths of sides of a triangle are x cm, y cm dan z cm. Given s is the half of the perimeter of the triangle. Which of the following formulae connects s, x , y and z correctly?
Panjang sisi sebuah segi tiga ialah x cm, y cm dan z cm. Diberi s adalah separuh bagi perimeter segi tiga itu. Antara berikut, formula yang manakah menghubungkan s, x, y dan z dengan betul?

- A $2s = x + y + z$
- B $s = \frac{xyz}{2}$
- C $s = x + y + z$
- D $s = \frac{x+y-z}{2}$

14. Given $y = \sqrt{\frac{12+x}{x}}$, find the value of x when $y = 4$.

Diberi $y = \sqrt{\frac{12+x}{x}}$, *cari nilai x apabila* $y = 4$.

- A 12
- B 8
- C 1.2
- D 0.8

LIVEWORKSHEETS

15. Given $A = \pi r^2$, if $A = 154$ and $\pi = \frac{22}{7}$, then $r =$

Diberi $A = \pi r^2$, jika $A = 154$ dan $\pi = \frac{22}{7}$, maka $r =$

- A 7
- B 8
- C 9
- D 10

16. If $\frac{2y}{5} + 3 = p$, then $y =$

Jika $\frac{2y}{5} + 3 = p$, maka $y =$

- A $\frac{5(p-3)}{2}$
- B $\frac{5p-3}{2}$
- C $\frac{15-p}{2}$
- D $p - \frac{15}{2}$

17. Given $5x = \frac{y}{5x}$, state x in terms of y.

Diberi $5x = \frac{y}{5x}$, nyatakan x dalam sebutan y.

- A $\sqrt{25y}$
- B $\frac{\sqrt{y}}{25}$
- C $\frac{\sqrt{y}}{5}$
- D $\sqrt{\frac{y}{5}}$

18. Given $T = a + bc$, find the value of T when $a = 4$, $b = 6$ and $c = 0$.
Diberi $T = a + bc$, cari nilai T apabila $a = 4$, $b = 6$ dan $c = 0$.

- A 12
- B 10
- C 8
- D 4

19. In a tuition centre, the administrative fee is RM30 per student. The tuition fee is RM45 per subject for language subjects and RM40 for each other subject. Express the total payment, J, for a student who registers for m language subjects and n other subjects.
Di sebuah pusat tuisyen, yuran pentadbiran ialah RM30 per murid. Yuran tuisyen ialah RM45 setiap subjek untuk subjek bahasa dan RM40 untuk setiap subjek yang lain. Ungkapkan jumlah bayaran, J, seorang murid yang mendaftar untuk m subjek bahasa dan n subjek yang lain.

- A $J = 115 + m + n$
- B $J = 30 + 45m + 40n$
- C $J = 30 + 85(m + n)$
- D $J = 45m + 40n - 30$

LIVEWORKSHEETS

20.

If $\frac{c}{d} - c = 7$, then $c =$

Jika $\frac{c}{d} - c = 7$, *maka* $c =$

- A $\frac{7(1+d)}{d}$
- B $\frac{7(1-d)}{d}$
- C $\frac{7d}{1-d}$
- D $\frac{7d}{1+d}$

LIVEWORKSHEETS