

1. P varies directly as the cube root of Q .
The relationship between P and Q is
 P berubah secara langsung dengan punca kuasa tiga Q .
Hubungan antara P dengan Q ialah

A $P \propto Q^{\frac{1}{3}}$

C $P \propto \frac{1}{Q^3}$

B $P \propto Q^3$

D $P \propto \frac{1}{Q^{\frac{1}{3}}}$

2. P varies inversely as the cube root of Q .
Given that k is a constant, find the relation between P and Q .
 P berubah secara songsang dengan punca kuasa tiga Q .
Diberi bahawa k ialah pemalar, cari hubungan antara P dengan Q .

A $P = kQ^{\frac{1}{3}}$

C $P = kQ^3$

B $P = \frac{k}{Q^{\frac{1}{3}}}$

D $P = \frac{k}{Q^3}$

3. It is given that F varies directly as the square root of G and inversely as the square of H .
Find the relationship between F , G and H .
Diberi bahawa F berubah secara langsung dengan punca kuasa dua G dan secara songsang dengan kuasa dua H .

Cari hubungan antara F , G dan H .

A $F \propto \frac{G^2}{\sqrt{H}}$

C $F \propto \frac{H^2}{\sqrt{G}}$

B $F \propto \frac{\sqrt{G}}{H^2}$

D $F \propto \frac{\sqrt{H}}{G^2}$

4. It is given that F varies directly as the cube root of G and inversely as the square of H .
Find the relation between F , G and H .
Diberi bahawa F berubah secara langsung dengan punca kuasa tiga G dan secara songsang dengan kuasa dua H .
Cari hubungan antara F , G dan H .

A $F \propto \frac{G^3}{\sqrt{H}}$

B $F \propto \frac{\sqrt{H}}{G^3}$

C $F \propto \frac{\sqrt[3]{G}}{H^2}$

D $F \propto \frac{H^2}{\sqrt[3]{G}}$

5. Table below shows some values of the variables x and y where y varies inversely as the square root of x .
Jadual di bawah menunjukkan beberapa nilai pemboleh ubah x dan y dengan keadaan y berubah secara songsang dengan punca kuasa dua x .

x	25	100
y	2	1

Table /Jadual

Find the relation between y and x .
Cari hubungan antara y dengan x .

A $y = 10\sqrt{x}$

C $y = 25\sqrt{x}$

B $y = \frac{10}{\sqrt{x}}$

D $y = \frac{25}{\sqrt{x}}$

6. Given p varies directly as the square of q and inversely as r . Find the relation between p , q and r .
Diberi p berubah secara langsung dengan kuasa dua q dan secara songsang dengan r . Cari hubungan antara p , q dan r .

A $p \propto q^2r$

B $p \propto \frac{q^2}{r}$

C $p \propto \frac{r}{q^2}$

D $q^2 \propto \frac{p}{r}$

7. P varies directly as the cube root of Q and varies inversely as the square of T .
Given that the constant is k , find the relation between P , Q and T .

P berubah secara langsung dengan punca kuasa tiga Q dan berubah secara songsang dengan kuasa dua T.

Diberi k ialah pemalar, cari hubungan antara P, Q dan T.

A $P = \frac{kQ^3}{\sqrt{T}}$ **C** $P = \frac{k\sqrt[3]{Q}}{T^2}$

B $P = \frac{k\sqrt{Q}}{T^2}$ **D** $P = \frac{k\sqrt[3]{Q}}{\sqrt{T}}$

8. Given $E \propto F$ and $E = 14$ when $F = 4$. Find the value of E when $F = 6$.

Diberi $E \propto F$ dan $E = 14$ apabila $F = 4$. Cari nilai E apabila $F = 6$.

- A** 12 **C** 24
B 21 **D** 42

9. y varies inversely as the cube of x . Find the relation between y and x .

y berubah secara songsang dengan kuasa tiga x. Cari hubungan antara y dan x.

- A** $y \propto x^3$
B $y \propto \sqrt[3]{x}$
C $y \propto \frac{1}{x^3}$
D $y \propto \frac{1}{\sqrt[3]{x}}$

10. m varies inversely as the square root of n .

The relation between m and n is

m berubah secara songsang dengan punca kuasa dua n.

Hubungan antara m dan n ialah

- A** $m \propto \frac{1}{n^2}$
B $m \propto \frac{1}{\sqrt{n^2}}$
C $m \propto n^2$
D $m \propto \sqrt[n^2]{1}$