

Pemfaktoran dan Pecahan Algebra

Factorisation and Algebraic Fractions

BAHAGIAN A

1. Kembangkan:

Expand:

$$2k(k + 7)$$

A $2k + 14$

B $2k + 14k$

C $2k^2 + 14$

D $2k^2 + 14k$

2. Kembangkan:

Expand:

$$-5p(-3 + q)$$

A $15p - 5pq$

B $15p + 5pq$

C $-15p - 5pq$

D $-15p + 5pq$

3. Kembangkan:

Expand:

$$\frac{2}{5}(-25b - 10c)$$

A $10b - 4c$

B $-10b - 4c$

C $-10b - 20c$

D $10b - 20c$

4. Permudahkan:

Simplify:

$$(3g + 7) + 2(5g - h)$$

A $13g - 2h + 7$

B $13g + 2h + 7$

C $13g + 2h - 7$

D $13g - 2h - 7$

5. Faktorkan selengkapnya:

Factorise completely:

$$36p^2 - 1$$

A $6p - 1$

B $6p + 1$

C $(6p - 1)(6p - 1)$

D $(6p - 1)(6p + 1)$

6. Faktorkan selengkapnya:

Factorise completely:

$$e^2 + ef - 3e - 3f$$

A $(e + 3)(e + f)$

B $(e - 3)(e + f)$

C $(e + 3)(e - f)$

D $(e - 3)(e - f)$

7. Tentukan faktor sepunya bagi $5bc$, $2c^2$ dan $3cd$.

Determine the common factors for $5bc$, $2c^2$ and $3cd$.

A b

B c

C $1, b$

D $1, c$

8. Permudahkan ungkapan berikut.

Simplify the following expression.

$$\frac{3g}{2} + \frac{h}{3j}$$

A $\frac{3gh}{6j}$

B $\frac{9gh}{6j}$

C $\frac{9gj + 2h}{6j}$

D $\frac{9gj + 2h}{5j}$

9. Permudahkan ungkapan berikut.

Simplify the following expression.

$$\frac{b^2 - 1}{3} \times \frac{3}{b + 1}$$

A $b - 1$

B $b + 1$

C $\frac{b - 1}{3}$

D $\frac{b + 1}{3}$