

St. Andrews Scots Sr. Sec. School

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Session 2025-2026

Class: VIII

Subject: Maths

Topic: Factorisation

Worksheet: 11

Q1: Find the common factors of the given terms.

- (i) 12x, 36
- (ii) 14 pq, $28p^2q^2$
- (iii) 6 abc, $24ab^2$, $12a^2b$
- (iv) 10 pq, 20qr, 30 rp
- (v) $3x^2y^3$, $10x^3y^2$, $6x^2y^2z$

Q2: Factorise the following expressions

- (i) $7x-42$
- (ii) $6p-12q$
- (iii) $7a^2+14a$
- (iv) $-16z+20z^3$
- (v) $20l^2m+30alm$

Q3: Factorise.

- (i) $x^2+xy+8x+8y$
- (ii) $15xy-6x+5y-2$
- (iii) $ax+bx-ay-by$
- (iv) $15pq+15+9q+25p$
- (v) $z-7+7xy-xyz$

Q4: Factorise the following expressions.

- (i) $a^2+8a+16$
- (ii) $p^2-10p+25$
- (iii) $25m^2+30m+9$
- (iv) $49y^2+84yz+36z^2$

Q5: Factorise.

- (i) $4p^2-9q^2$
- (ii) $63a^2-112b^2$
- (iii) $49x^2-36$
- (iv) $16x^5-144x^3$
- (v) $(l+m)^2-(l-m)^2$

Q6: Factorise the expressions.

- (i) ax^2+bx
- (ii) $7p^2+21q^2$
- (iii) $2x^3+2xy^2+2xz^2$
- (iv) $am^2+bm^2+bn^2+an^2$
- (v) $(lm+l)+m+1$

Q7: Factorise the following expressions.

- (i) p^2+6p+8
- (ii) $q^2-10q+21$
- (iii) $p^2+6p-16$

Q8: Carry out the following divisions.

- (i) $28x^4 \div 56x$
- (ii) $-36y^3 \div 9y^2$
- (iii) $66pq^2r^3 \div 11qr^2$
- (iv) $34x^3y^3z^3 \div 51xy^2z^3$
- (v) $12a^8b^8 \div (-6a^6b^4)$

Q9: Divide the given polynomial by the given monomial.

- (i) $(5x^2-6x) \div 3x$
- (ii) $(3y^8-4y^6+5y^4) \div y^4$
- (iii) $8(x^3y^2z^2+x^2y^3z^2+x^2y^2z^3) \div 4x^2y^2z^2$
- (iv) $(x^3+2x^2+3x) \div 2x$
- (v) $(p^3q^6-p^6q^3) \div p^3q^3$