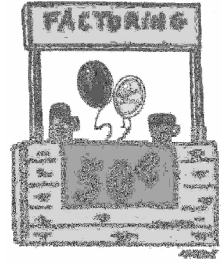


Factoring: Multiple Methods

When factoring, always

- common factor if possible
- factor using appropriate method (difference of squares or sum & product)
- check your answer to see any factors can be factored further



Example 1

a. $3x^2 + 21x + 36$

b. $2x^2 - 50$

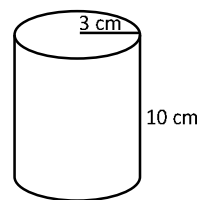
c. $4x^2 - 8x - 60$

Example 2

The surface area of a cylinder is given by the formula $SA = 2\pi r^2 + 2\pi rh$.

a. Factor the expression for the surface area.

- b. A cylinder has radius 3 cm and height 10 cm. Use both the original expression and the factored expression to find the surface area of this cylinder to the nearest square centimetre.



- c. Why would the factored form of the formula be more useful than the original form?
