

Name: _____



Highest common factor with algebraic terms

Task A: Listing factors of algebraic terms

1) Jacob writes down the factors of $8a$



2, 4, 8, a , $2a$, $4a$

a) Which factors have they missed?

b) What could they have done to make it easier to be certain they had all the factors?

2) List the factors of each term.

$$22a$$

$$8a^2$$

$$8ab$$

Task B: Finding common factors

1) Find the common **factors** of the below expressions:

$$5x \quad \text{and} \quad 20x$$

$$5x \quad \text{and} \quad 20xy$$

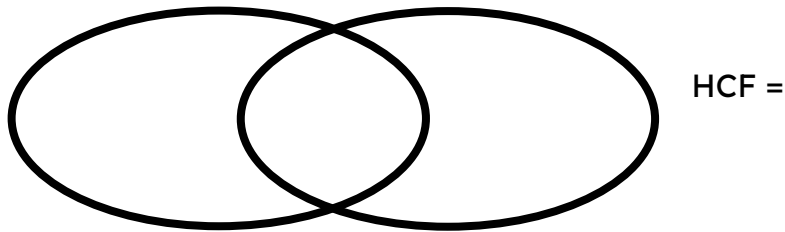
$$5xy \quad \text{and} \quad 20xy$$

$$4xy \quad \text{and} \quad 20xy$$

$$5x^2 \quad \text{and} \quad 20x^3$$

Task C: Finding the HCF using Venn diagrams1) Populate the Venn diagram to find the HCF of $24ac$ and $30ab$

$$24ac \equiv 2 \times 2 \times 2 \times 3 \times a \times c \quad 30ab \equiv 2 \times 3 \times 5 \times a \times b$$



2) Find the HCF of the below pairs of expressions.

a) $15x$ $10x$ HCF =

b) $15x$ $10xy$ HCF =

c) $15x^2$ $20xy$ HCF =

d) $15x^2y$ $20xy$ HCF =

e) $15x^2y$ $20x^2y^5$ HCF =

f) $15x^2y$ $60x^2y^5$ HCF =

