

6.a)  $3^5$     b)  $2^7$     c)  $7^2$     d)  $5^6$

7.a)  $b$     b)  $a^2$     c)  $3^{a-b}$     d)  $7^0 = 1$     e)  $11^{25}$

f)  $w^{a+3}$     g)  $5^0 = 1$     h)  $8^2$     i)  $(-2)^6$

10. A4    B2    C6    D3    E1    F5

11.a)  $3^6$     b)  $1$     c)  $2^{-4} \times 10^{20}$

12. a)  $3^8$  cm    b)  $2^{17}$  mm    c)  $2^3$ cm    d) 9 dm

## Factorization

What does it mean to find the factors of something?

6

12



What are the common factors?

What are the factors of  $2ab^2$ ?

How can we factor something like  $5x^2 + 15x$ ?

1. Find the greatest common factor (GCF).
2. Divide everything by the GCF.
3. Multiply answers from 1 and 2. Check to see if you missed any common factors.

Factoring can help us to **simplify** an expression.

Before you go...

1. Write the following as a base raised to a power:

$$4 \times 64 \times \sqrt{4} \times \frac{1}{4}$$

2. Convert the following into scientific notation:

-0.000 005 67

3. Does  $(3a)^4 = 3a^4$ ? Why or why not?

HW. p. 106 - 108

#1, 2, 3, 4, 5