

8.2) Factorial notation

Worked example

Find the number of different ways of arranging the letters $ABCD$

Your turn

Find the number of different ways of arranging the letters $ABCDE$

$$5! = 120$$

Worked example

Find the number of ways of a football coach choosing 11 starting players from a squad of 18

Your turn

Find the number of ways of a netball coach choosing 7 starting players from a squad of 12

$$\frac{12!}{7!5!} = 792$$

Worked example

Using factorials, evaluate:

$$1!$$

$$\binom{10}{0}$$

Your turn

Using factorials, evaluate:

$$0!$$

$$1$$

$$\binom{20}{1}$$

$$20$$

$$190$$

$$190$$