## Factorial Examples with SimBraille

1. Six factorial is written
$6!$
: : : : :
2. Four factorial equals twenty-four is written $4!=24$
::\%:: : : : : : :
3. Five factorial equals five time four times three times two times one is written
$5!=5 \times 4 \times 3 \times 2 \times 1$

4. n factorial equals n times open parenthesis n minus one close parenthesis times open parenthesis $n$ minus two close parenthesis times ellipsis times three times two times one is written

$$
n!=n \times(n-1) \times(n-2) \times \ldots \times 3 \times 2 \times 1
$$

:: :

5. Open fraction n factorial over open parenthesis n minus k close parenthesis factorial close fraction is written
$n!$
$\overline{(n-k)!}$
:::::\%::\%: .: :::: : :
6. Open fraction five factorial over one factorial four factorial close fraction is written $5!$
$1!4!$
:::\%:\%:\%:\%:
7. Open fraction n factorial over open parenthesis n minus r close parenthesis factorial r factorial close fraction is written

$$
\frac{n!}{-r)!r!}
$$

: :: : : : : : : : : : : : : : : : : : :

