



Algebra, Integers, Factorials

Name _____

Date _____

Simplify These Factorials

(1) $(8 + 2)!$

(2) $\frac{7!}{2! \cdot 6!}$

(3) $(0 + 8)!$

(4) $(6 - 3)!$

(5) $(3 - 2)!$

(6) $(7 - 4)!$

(7) $\frac{10!}{2! \cdot 7!}$

(8) $\frac{9!}{3! \cdot 8!}$

(9) $\frac{10!}{3! \cdot 3!}$

(10) $\frac{6!}{1! \cdot 4!}$

(11) $\frac{7!}{2! \cdot 5!}$

(12) $(7 + 3)!$



Answers

Simplify These Factorials

$$(1) \quad (8 + 2)!$$

$$= 3628800$$

$$(3) \quad (0 + 8)!$$

$$= 40320$$

$$(5) \quad (3 - 2)!$$

$$= 1$$

$$(7) \quad \frac{10!}{2! \cdot 7!}$$

$$= 360$$

$$(9) \quad \frac{10!}{3! \cdot 3!}$$

$$= 100800$$

$$(11) \quad \frac{7!}{2! \cdot 5!}$$

$$= 21$$

$$(2) \quad \frac{7!}{2! \cdot 6!}$$

$$= \frac{7}{2}$$

$$(4) \quad (6 - 3)!$$

$$= 6$$

$$(6) \quad (7 - 4)!$$

$$= 6$$

$$(8) \quad \frac{9!}{3! \cdot 8!}$$

$$= \frac{3}{2}$$

$$(10) \quad \frac{6!}{1! \cdot 4!}$$

$$= 30$$

$$(12) \quad (7 + 3)!$$

$$= 3628800$$