

Combinatorial Theory



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Status	Professor
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Keywords	Enumerative combinatorics, Discrete mathematics
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Technical Support Skills	For a question of overall mathematics, I answer as far as it is answered.
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Research Contents

With any four different positive integers under 10, we can make 10 only using $+$, $-$, \times , \div or $()$.

$1+2+3+4=10$	$1 \times 2+3+5=10$	$2+3+6-1=10$	$7+3 \times (2-1)=10$	$1+3+8-2=10$	$9+3-2 \times 1=10$
$2+4+5-1=10$	$6+4 \times (2-1)=10$	$1+4+7-2=10$	$8+4 \times 1 \div 2=10$	$9+4 \div 2-1=10$	$1+5+6-2=10$
$7+5-2 \times 1=10$	$8+5-1-2=10$	$(9+1) \div 2+5=10$	$7+6 \div 2 \times 1=10$	$8+6 \div 2-1=10$	$6+(9-1) \div 2=10$
$7+8 \div 2-1=10$	$7+9 \div (1+2)=10$	$1 \times 2 \times 9-8=10$	$5 \times (4+1-3)=10$	$(4+1) \times 6 \div 3=10$	$3 \times (7-4)+1=10$
$1+4+8-3=10$	$9+(4-3) \times 1=10$	$5 \times 6 \div 3 \times 1=10$	$1+5+7-3=10$	$8+(5-3) \times 1=10$	$9+5-1-3=10$
$1+7+6 \div 3=10$	$8+6 \div 3 \times 1=10$	$1+6+9 \div 3=10$	$8+(7-1) \div 3=10$	$7+9 \div 3 \times 1=10$	$8+9 \div 3-1=10$
$5 \times (6-4) \times 1=10$	$5 \times (7-4-1)=10$	$5 \times 8 \div 4 \times 1=10$	$9+(5-4) \times 1=10$	$1+6+7-4=10$	$6+8-4 \times 1=10$
$6+9-1-4=10$	$2 \times 3+9-5=10$	$(7-2) \times 6 \div 3=10$	$(6+8) \div 2+3=10$	$9+6-2-3=10$	$7+8-2-3=10$
$7+9-2 \times 3=10$	$8 \div 2+9-3=10$	$5 \times (2+6) \div 4=10$	$2+5+7-4=10$	$5 \times (8-4) \div 2=10$	$2+4+9-5=10$
$(7-2) \times (6-4)=10$	$8+(2+6) \div 4=10$	$(9-6) \times 4-2=10$	$(7-2) \times 8 \div 4=10$	$7+9-2-4=10$	$2 \times (4+9-8)=10$
$2+6+7-5=10$	$8+2 \times (6-5)=10$	$2+5+9-6=10$	$(5+7+8) \div 2=10$	$9+(7-5) \div 2=10$	$8+9-2-5=10$
$8+2 \times (7-6)=10$	$2+6+9-7=10$	$9+(2+6) \div 8=10$	$2+7+9-8=10$	$3 \times 4 \times 5 \div 6=10$	$3 \times 4-7+5=10$
$5+3+8 \div 4=10$	$3 \times 5+4-9=10$	$4 \times (7-3)-6=10$	$(8-3) \times (6-4)=10$	$3+4+9-6=10$	

Q. With 3,4,7 and 8, make 10 only using $+$, $-$, \times , \div or $()$ like above.

Available Facilities and Equipment
