

# Order of Operations



1) Calculate

$$3 + 7 \times 4$$

2) Calculate

$$10 \div (8 - 6)$$

3) Calculate

$$(4 + 5) \times 2^3$$



## N 1.5 Order of Operations

I'm giving it a try!

Calculate:

(a)  $8 \times 2 + 3$

(b)  $8 + 2 \times 3$

(c)  $8 \times 2 - 3$

(d)  $8 - 2 \times 3$

(e)  $8 \div 2 + 3$

(f)  $8 \div 2 - 3$

(g)  $7 + 8 \div 2$

(h)  $7 - 9 \div 3$

(i)  $5 + 6 \times 4 + 1$

(j)  $5 \times 6 + 4 \times 1$

(k)  $7 + 3 \times 2 - 1$

(l)  $7 - 3 \times 2 + 1$

(m)  $5 - 6 \div 2 + 1$

(n)  $5 + 6 \div 2 - 1$

(o)  $8 \div 2 + 9 \div 3$

(p)  $5 \times 4 + 2 \div 2$

(q)  $8 \div 4 - 2 \times 1$

(r)  $4 \times 6 - 2 \times 5$

(s)  $5 \div 1 - 6 \div 2$

(t)  $8 - 2 \times 2 - 3$

My Reflections...



I'm building my confidence!

**Calculate:**

$(a) 8 \times (3 + 2)$

$(b) (8 + 3) \times 2$

$(c) 8 \times (3 - 2)$

$(d) (8 - 3) \times 2$

$(e) 9 \div (1 + 2)$

$(f) 6 \div (7 - 5)$

$(g) (7 + 8) \div 5$

$(h) (10 - 1) \div 3$

$(i) (5 + 2) \times 4 + 1$

$(j) 5 \times (6 + 4) - 1$

$(k) 7 + 3 \times (3 - 1)$

$(l) (7 - 3) \times 2 + 1$

$(m) 5 - 6 \div (2 + 1)$

$(n) (4 + 6) \div (3 - 1)$

$(o) 8 \div (2 + 2) - 1$

$(p) (5 \times 4 + 2) \div 2$

$(q) 8 \div (5 - 2 \times 2)$

$(r) (4 \times 6 - 9) \times 2$

$(s) 10 \div (5 - 6 \div 2)$

$(t) (8 - 2) \times (2 - 2)$

My Reflections...



**I'm ready for anything!**

**Calculate:**

(a)  $8 \times 3 + 2^2$     (b)  $8^2 - 4 \div 2$     (c)  $10 - 3^2 + 2$     (d)  $8 \times 2^2 - 5$     (e)  $9 \div 3 + \sqrt{16}$

(f)  $(7 - 5) \times 3^2$     (g)  $6 \times (2 + 1)^2$     (h)  $4^2 \div (10 - 8)$     (i)  $(5 + 2^2) \times (4 + 1)$     (j)  $\sqrt{25} \times (6 + 4)$

**Insert brackets into these calculations to make them correct:**

(k)  $7 + 3 \times 2 = 20$

(l)  $10 \div 2 + 3 = 2$

(m)  $8 - 6 \times 9 - 4 = 10$

(n)  $8 - 6 \times 9 - 4 = 14$

**My Reflections...**



## Extension

By using **EXACTLY** four 4's and **ONLY** the operations  $+$   $-$   $\times$   $\div$   $( )$  and  $\sqrt{\quad}$  can you make all the numbers from 0 to 9?

E.g.  $4 \div 4 + (4 - 4) = 1$

Challenge yourself to try bigger numbers.

How high can you get?

Are there any numbers that you cannot make?

## Homework

Retrieval Homework	Topic Homework
1) Find $\frac{4}{5}$ of 60	1) Calculate:
	$9 - 2 \times 3$
2) Calculate $7 + 3 \times 4$	2) Calculate:
	$8 \times 5 + 2 \times 6$
3) Find 20% of 180	3) Calculate:
	$10 \div (2 + 3)$
4) Calculate $-3 - 5$	4) Calculate:
	$10 \times (1 + 2)^2$
5) Calculate $0.9 \times 0.7$	5) Insert brackets to make this calculation correct:
	$8 \times 5 + 2 - 6 = 50$

My Reflections...



## Homework

Retrieval Homework	Topic Homework
1) Find $\frac{4}{5}$ of 60	1) Calculate:
	$9 - 2 \times 3$
2) Calculate $7 + 3 \times 4$	2) Calculate:
	$8 \times 5 + 2 \times 6$
3) Find 20% of 180	3) Calculate:
	$10 \div (2 + 3)$
4) Calculate $-3 - 5$	4) Calculate:
	$10 \times (1 + 2)^2$
5) Calculate $0.9 \times 0.7$	5) Insert brackets to make this calculation correct:
	$8 \times 5 + 2 - 6 = 50$

My Reflections...



## N 1.5 Order of Operations

### I'm giving it a try!

(a) 19 (b) 14 (c) 13 (d) 2 (e) 7

(f) 1 (g) 11 (h) 4 (i) 30 (j) 34

(k) 12 (l) 2 (m) 3 (n) 7 (o) 7

(p) 21 (q) 0 (r) 14 (s) 2 (t) 1

### I'm building my confidence!

(a) 40 (b) 22 (c) 8 (d) 10 (e) 3

(f) 3 (g) 3 (h) 3 (i) 29 (j) 49

(k) 13 (l) 9 (m) 3 (n) 5 (o) 1

(p) 11 (q) 8 (r) 30 (s) 5 (t) 0

### I'm ready for anything!

(a) 28 (b) 62 (c) 3 (d) 27 (e) 7

(f) 18 (g) 54 (h) 8 (i) 45 (j) 50

(k)  $(7 + 3) \times 2 = 20$  (l)  $10 \div (2 + 3) = 2$

(m)  $(8 - 6) \times (9 - 4) = 10$  (n)  $(8 - 6) \times 9 - 4 = 14$

### Extension

By using EXACTLY four 4's and ONLY the operations  $+$   $-$   $\times$   $\div$   $()$  and  $\sqrt{\quad}$  can you make all the numbers from 0 to 9?

Here are some possible solutions:

$$0 = 4 + 4 - (4 + 4)$$

$$1 = (4 + 4) \div (4 + 4)$$

$$2 = 4 \div 4 + 4 \div 4$$

$$3 = (4 + 4 + 4) \div 4$$

$$4 = (\sqrt{4} + \sqrt{4}) \times (4 \div 4)$$

$$5 = 4 + \sqrt{4} - (4 \div 4)$$

$$6 = 4 + \sqrt{4} \times (4 \div 4)$$

$$7 = 4 + \sqrt{4} + (4 \div 4)$$

$$8 = 4 + 4 + 4 - 4$$

$$9 = 4 + 4 + (4 \div 4)$$

### Homework

#### Retrieval Homework

(1) 48 (2) 19 (3) 36 (4) -8 (5) 0.63

#### Topic Homework

(1) 3 (2) 52 (3) 2 (4) 90 (5)  $8 \times (5 + 2) - 6 = 50$