

Name _____

Date _____



ORDER OF OPERATIONS 6.3

Work out the value of these expressions.

1) $4 + 5 \times 6 - 3 \times 12$

2) $9 + 21 \div 3 + 4 \times 5$

3) $6 - 7 \times 3 + 2 \times 5$

4) $12 - (3 \times 5 - 4)$

5) $3 \times 2^2 \times 5$

6) $10 + 5 \times 4^2 \div 2$

7) $5^2 - 2^3 \times 3$

8) $(2 + 4)^2 - (10 - 8)^3$

9) $7(3^2 - 5) - 6 \times 3$

10) $\frac{1}{2}(5 + 3 \times 3) - 4 \times 2$

11) $(11 - 3)^2 \div (15 - 11)$

12) $\frac{1}{3}(12 - 3 \times 5 + 4)$

13) $7 + 5^2 - 4^2 \times 2$

14) $(2 + 21 \div 7 - 4)^3$

15) $\frac{3}{4} \times 8 - 12 \div (11 - 8)$

16) $4 + 0.3 \times 6 - 2 \times 0.5$

17) $1 - 0.8 \div 2 + 0.5$

18) $0.3 + 0.7 \times 2 - 3.2 \div 4$

19) $3(0.4 + 0.8) - 0.5 \times 4$

20) $9 + 3 \times 4^2 \div 8 - 6$



ORDER OF OPERATIONS 6.3 ANSWERS

Work out the value of these expressions.

		Working Out	Answer
1)	$4 + 5 \times 6 - 3 \times 12$	$= 4 + 30 - 36 = 4 - 6 = -2$	-2
2)	$9 + 21 \div 3 + 4 \times 5$	$= 9 + 7 + 20 = 36$	36
3)	$6 - 7 \times 3 + 2 \times 5$	$= 6 - 21 + 10 = 16 - 21 = -5$	-5
4)	$12 - (3 \times 5 - 4)$	$= 12 - (15 - 4) = 12 - 11 = 1$	1
5)	$3 \times 2^2 \times 5$	$= 3 \times 4 \times 5 = 12 \times 5 = 60$	60
6)	$10 + 5 \times 4^2 \div 2$	$= 10 + 5 \times 16 \div 2 = 10 + 80 \div 2 = 10 + 40 = 50$	50
7)	$5^2 - 2^3 \times 3$	$= 25 - 8 \times 3 = 25 - 24 = 1$	1
8)	$(2 + 4)^2 - (10 - 8)^3$	$= (6)^2 - (2)^3 = 36 - 8 = 28$	28
9)	$7(3^2 - 5) - 6 \times 3$	$= 7(9 - 5) - 18 = 7(4) - 18 = 28 - 18 = 10$	10
10)	$\frac{1}{2}(5 + 3 \times 3) - 4 \times 2$	$= \frac{1}{2}(5 + 9) - 8 = \frac{1}{2}(14) - 8 = 7 - 8 = -1$	-1
11)	$(11 - 3)^2 \div (15 - 11)$	$= (8)^2 \div (4) = 64 \div 4 = 16$	16
12)	$\frac{1}{3}(12 - 3 \times 5 + 4)$	$= \frac{1}{3}(12 - 15 + 4) = \frac{1}{3}(1) = \frac{1}{3}$	$\frac{1}{3}$
13)	$7 + 5^2 - 4^2 \times 2$	$= 7 + 25 - 16 \times 2 = 32 - 32 = 0$	0
14)	$(2 + 21 \div 7 - 4)^3$	$= (2 + 3 - 4)^3 = (1)^3 = 1$	1
15)	$\frac{3}{4} \times 8 - 12 \div (11 - 8)$	$= 6 - 12 \div (3) = 6 - 4 = 2$	2
16)	$4 + 0.3 \times 6 - 2 \times 0.5$	$= 4 + 1.8 - 1 = 4 + 0.8 = 4.8$	4.8
17)	$1 - 0.8 \div 2 + 0.5$	$= 1 - 0.4 + 0.5 = 1.1$	1.1
18)	$0.3 + 0.7 \times 2 - 3.2 \div 4$	$= 0.3 + 1.4 - 0.8 = 0.9$	0.9
19)	$3(0.4 + 0.8) - 0.5 \times 4$	$= 3(1.2) - 2 = 3.6 - 2 = 1.6$	1.6
20)	$9 + 3 \times 4^2 \div 8 - 6$	$= 9 + 3 \times 16 \div 8 - 6 = 9 + 48 \div 8 - 6 = 9 + 6 - 6 = 9$	9