KEY

Order of Operations (Negative and Powers) Notes

1) $(-1)^3 =$

$(-1)(-1)(-1) = \boxed{-1}$

$(+1)(-1)$

2) $-2^3 =$

$-(2 \cdot 2 \cdot 2) = \boxed{-8}$

$-(8)$

3) $-3^2 =$

$-(3 \cdot 3) = \boxed{-9}$

$-(9)$

4) $(-2)^2 =$

$(-2 \cdot -2) = \boxed{4}$

5) $-(-4)^2 =$

$-(-4 \cdot -4) = \boxed{-16}$

$-(16)$

6) $-2^3 + 3 =$

$-(2 \cdot 2 \cdot 2) + 3 = \boxed{-5}$

$-8 + 3$

7) $1 - 3(8 \div 2)^2 =$

$1 - 3(4)^2 = \boxed{-47}$

$1 - 3(16)$

$1 - 48$

8) $(3-7)^2 \times -5 =$

$(-4)^2 \times -5$

$(-4 \cdot -4) \times -5 = \boxed{-80}$

16×-5

9) $(-6)^2 + 30 \div \frac{1}{2} =$

$(-6 \cdot -6) + 30 \div \frac{1}{2}$

$36 + 30 \div \frac{1}{2} = \boxed{51}$

$36 + 15$

10) $25 - 4(3 \times -9) =$

$25 - 4(-27)$

$25 - -108$

$25 + 108 = \boxed{133}$

11) $-(-8)^2 + (-70 \div 7) =$

$-(-8 \cdot -8) + (-70 \div 7)$

$-(64) + (-10) = \boxed{-74}$

12) $-11 - 6(-2^4 + 4) =$

$-11 - 6(-16 + 4)$

$-11 - 6(-12)$

$-11 - -72 = -11 + 72 = \boxed{61}$

13) $-32 \div 4 + (-7)^2 =$

$-32 \div 4 + (-7 \cdot -7)$

$-32 \div 4 + 49$

$-8 + 49 = \boxed{41}$

14) $-6 + 9^2 \div -3 \times 5 =$

$-6 + 81 \div -3 \times 5$

$-6 + -27 \times 5$

$-6 + -135 = \boxed{-141}$

15) $11 - 4^2 - 3 \times 5 =$

$11 - 16 - 3 \times 5$

$11 - 16 - 15$

$-5 + -15 = \boxed{-20}$

16) $(-6 + 1) \times 4 - 2^3 =$

$(-5) \times 4 - 8$

$-20 - 8$

$-20 + -8 = \boxed{-28}$

17) $42 - 5(4 - 7)^2 =$

$42 - 5(-3)^2$

$42 - 5(-3 \cdot -3)$

$42 - 5(9) = 42 - 45 = \boxed{-3}$

18) $(-7 + 4 \times 6) - 8^2 =$

$(-7 + 24) - 8^2$

$17 - 64$

$17 + -64 = \boxed{-47}$

19) $28 \div (2)^2 + 2\frac{1}{3} =$

$28 \div 4 + 2\frac{1}{3}$

$7 + 2\frac{1}{3} = \boxed{9\frac{1}{3}}$

20) $-56.4 - 2(-4 + 3)^3$

$-56.4 - 2(-1)^3$

$-56.4 - 2(-1 \cdot -1 \cdot -1)$

$-56.4 - 2(-1)$

$-56.4 - -2$

$-56.4 + 2 = \boxed{-54.4}$