

Integers – Lesson 11

Today we will start our lesson with some revision of the four operations. We will follow that up with some work on the order of operations. Finally, we will look at some more equations

First try these examples: -

1) $-16 + 2$

2) $-16 - 2$

3) -16×2

4) $-16 \div 2$

5) $16 + -2$

6) $16 -- 2$

7) 16×-2

8) $16 \div -2$

9) $-16 + -2$

10) $-16 -- 2$

11) -16×-2

12) $-16 \div -2$

Remember the order of operations: -

- Brackets
- Powers
- Multiplying and dividing
- Adding and subtracting

Now try these examples: -

13) $-2 \times -3 + -4 \times -5$

14) $-2 + -3 \times -4 + -5$

15) $-2 \times (-3 + -4) \times -5$

16) $20 \div -10 + -30 \div -3$

17) $-20 \div -10 - 30 \div -3$

18) $-100 \div (-2 + -3)$

19) $(-2 + -3)^2 + (-4 + -5)^2$

20) $(-2)^2 + (-3)^2 + (-4)^2 + (-5)^2$

21) $(-2)^2 + (-3 + -4)^2 + (-5)^2$

Look carefully at these two equations – can you see the difference?

| | |
|---|--|
| <p>a) $4x + 4 = -24$ $4x = -28$ $x = -7$</p> | <p>b) $-4x + 4 = -24$ $-4x = -28$ $x = 7$</p> |
|---|--|

Now try these examples: -

22) $5x + 5 = -20$

23) $-5x + 5 = -20$

24) $5x - 5 = -20$

25) $-5x - 5 = -20$

26) $4x + 20 = 0$

27) $-4x + 20 = 0$

28) $4x - 20 = 0$

29) $-4x - 20 = 0$

30) $10x + 100 = 10$

31) $-10x + 100 = 10$

32) $10x - 10 = 10$

33) $-10x - 10 = -10$